

Energy drinks trigger abnormal heart rhythm, rise in blood pressure

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A clinical trial led by researchers from University of the Pacific and David Grant Medical Center adds to the evidence that energy drinks may be bad for your heart. Results of the study will be presented today at a meeting of the American Heart Association in Phoenix, Arizona.

"Our findings suggest certain energy drinks may increase the risk of having an abnormal heart rhythm when consumed in high volumes," said primary investigator Sachin A Shah, an associate professor of pharmacy practice at Pacific's Thomas J. Long School of Pharmacy and Health Sciences. "While we wait for more data, some consumers should exercise caution and not blindly follow the buzz."

Phillip Oppenheimer, dean and professor of pharmacy practice at Pacific, said the findings are of special concern among young adults. "Energy drinks are widely consumed within the college population, which further extends the relevance of this study," Oppenheimer said.

The study enrolled 27 healthy volunteers between the ages of 18 and 40. Subjects drank either two cans of an energy drink, an equivalent volume of a drink containing panax ginseng (an ingredient in the energy drink), or a placebo beverage once a day, every six days, for three weeks. Neither the volunteers nor the researchers knew who was getting which drink until the end of the three weeks.

The researchers measured subjects' heart rhythm and [blood pressure](#) before the drinks were consumed and four times during the six hours

immediately afterward.

The volunteers who consumed the energy drink experienced a statistically significant increase in a marker of [abnormal heart rhythm](#) risk known as the QTc interval. These volunteers also experienced a slight rise in blood pressure. These effects persisted for two hours after the energy drink was consumed.

In contrast, the ginseng and placebo groups showed no rises in QTc interval or blood pressure.

Shah noted that some drugs contain a warning in their package insert when the drug has been shown to prolong the QTc interval to a degree similar to that seen in the study (6 milliseconds).

Energy drinks have been associated with sudden deaths. As of June 2014, the Center for Science in Public Interest, a consumer health advocacy group, had collected reports of 34 deaths that may have been associated with energy drinks.

According to Shah, more research needs to be performed assessing the heart rhythm and blood pressure effects of [energy drinks](#), especially in those with underlying cardiac conditions such as congenital long QT syndrome and hypertension.

Provided by University of the Pacific

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