



# Know The Toxic Health Effects Of Energy Drinks

---

[flexfusionstudios.com](http://flexfusionstudios.com)



People often consume ultra-processed “energy drinks” as a much-needed pick-me-up to get them through the day. But while the promise of increased mental and physical performance is attractive, it hides the lesser-known health risks that could be causing harm.

Popular energy drinks contain additives, including caffeine, sugar, and legal stimulants like L-carnitine, guarana, and taurine. While those legal stimulants increase alertness, attention, and energy, they also raise blood pressure, heart and breathing rate and contribute to dehydration, insomnia and anxiety. Research also suggests that the adverse effects of energy drinks on blood vessel function may connect to more severe cardiovascular problems.




In one study, researchers at the McGovern Medical School at UTHealth in Houston carried out a controlled experiment on 44 students and the effects of energy drink consumption. They discovered that all the subjects' blood vessels narrowed to nearly half their size 90-minutes after consuming a large energy drink.

The smaller the vessels, the more challenging it is for the heart to pump blood to various body parts, including the lungs and brain. The decreased blood flow can cause chest pain, shortness of breath or even a heart attack. According to the researchers, these problematic effects are likely due to the energy drink's combination of caffeine, taurine, sugar, and "herbals."

Another report in the US declares that 1,499 adolescents aged between 12 and 17 got rushed to hospital for an energy drink-related emergency in 2011 alone.





**What do energy drinks do  
to the body after we  
consume them?**



### **10 Minutes After Drinking**

It takes about 10 minutes for caffeine to enter your bloodstream after you consume an energy drink and your heart rate and blood pressure begin to increase.

### **15-45 Minutes**

That is when the caffeine level in your bloodstream peaks. As the stimulant begins to affect you, you will feel more alert, improving your concentration and overall alertness.

### **30-50 Minutes**

Caffeine is completely absorbed, and your liver responds by absorbing more sugar into the bloodstream.

### **1 Hour**

Your body begins to experience a sugar crash and the effects of the caffeine wearing off, and you begin to feel tired and low on energy.

### **5-6 Hours**

That is the caffeine half-life, which means it takes your body 5-6 hours to reduce the caffeine content in your bloodstream by 50%.

### **12 Hours**

The amount of time it takes for most people to remove caffeine from their bloodstream altogether. The rate at which this occurs is affected by various factors ranging from age to activity level.

### **12-24 Hours**

Caffeine is a drug, so those who consume it regularly may experience withdrawal symptoms 12-24 hours after the last dose; headaches, irritability, and constipation are some of the symptoms.

### **7-12 Days**

According to studies, seven to twelve days is the time frame for your body to become tolerant to regular caffeine consumption. Which means you'll get used to it and won't feel the effects as strongly.

# Five Tips To Keep In Mind

Many scientists agree that in moderate doses, caffeine can help improve individual cognitive performance, such as vigilance, attention, and alertness. And caffeine enhances endurance more than short-term, high-intensity, or strength activities.

Regardless of which energy drink you choose or whether you prefer naturally caffeinated drinks like coffee or green tea, here are five tips to remember about caffeine:

**Tip #1:** If you choose to use caffeine to increase performance, try it before the day of an event or occasion to assess your tolerance. Caffeine may help, but you might not need it.

**Tip #2:** More caffeine won't improve your performance, and higher doses may have adverse side effects.

**Tip #3:** Avoid caffeine for at least six hours before bedtime, so it doesn't interfere with your sleep.

**Tip #4:** Caffeine can boost mental performance temporarily, but it's not a substitute for quality sleep and nutrition.

**Tip #5:** Watch out for caffeine supplements combined with other stimulants. Very little information exists about the safety of combining caffeine with other ingredients.



# References & Further Reading

<https://newsroom.heart.org/news/just-one-energy-drink-may-hurt-blood-vessel-function?preview=48c0>

Seifert SM, Schaechter JL, Hershorin ER, Lipshultz SE. Health effects of energy drinks on children, adolescents, and young adults. *Paediatrics*. 2011;127(3), 511-528.

Center for Behavioral Health Statistics and Quality. The DAWN Report: Update on Emergency Department Visits Involving Energy Drinks: A Continuing Public Health Concern. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013.

Al-Shaar L, Vercammen K, Lu C, Richardson S, Tamez M, Mattei J. Health Effects and Public Health Concerns of Energy Drink Consumption in the United States: A Mini-Review. *Front Public Health*. 2017;5:225.

Ehlers A, Marakis G, Lampen A, Hirsch-Ernst KI. Risk assessment of energy drinks with focus on cardiovascular parameters and energy drink consumption in Europe. *Food and Chemical Toxicology*. 2019 Aug 1;130:109-21.

Centers for Disease Control and Prevention. The Buzz on Energy Drinks.  
<https://www.cdc.gov/healthyschools/nutrition/energy.htm> Accessed 8/21/19.

Pound CM, Blair B; Canadian Paediatric Society, Nutrition and Gastroenterology Committee, Ottawa, Ontario. Energy and sports drinks in children and adolescents. *Paediatr Child Health*. 2017 Oct;22(7):406-410.

De Sanctis V, Soliman N, Soliman AT, Elsedfy H, Di Maio S, El Kholy M, Fiscina B. Caffeinated energy drink consumption among adolescents and potential health consequences associated with their use: a significant public health hazard. *Acta Biomed*. 2017 Aug 23;88(2):222-231.

Wiggers D, Asbridge M, Baskerville NB, Reid JL, Hammond D. Exposure to Caffeinated Energy Drink Marketing and Educational Messages among Youth and Young Adults in Canada. *Int J Environ Res Public Health*. 2019 Feb 21;16(4).