



HOW MANY ENERGY DRINKS WOULD IT TAKE TO OVERDOSE?



Packed with caffeine, sugar, and other fancy-sounding miracle ingredients like taurine and unicorn tears, energy drinks promise to help you stay awake, boost athletic performance, and give you wings (maybe).

Sure, these promises seem a little far-fetched, but anyone who's had one or two of these drinks in a row knows that too many of them can make you a jittery mess.

So at what point does your regular energy drink become dangerous? If caffeine is technically a drug, then is it possible to overdose on caffeine-laced energy drinks?

What's in energy drinks that might kill you?

Energy drinks get their energy mostly from caffeine, about 50mg to 250mg per can. But most formulas contain other energy-producing ingredients, such as guarana (another stimulant), ginseng (herbal supplement supposed to help with energy and mental function), and B vitamins (also for energy).

These fizzy beverages also tend to be packed with lots of sugar to make them tolerable. Although 20g to 30g of sugar in a serving isn't necessarily deadly on the spot, too much of the sweet stuff can lead to a whole host of life-threatening issues, such as diabetes, metabolic disorders, and heart disease. Sure, there are sugar-free varieties, but those are just laced with artificial sweeteners instead; not exactly a marked improvement.

But in terms of an overdose and what can kill you the fastest, the most dangerous of all these magical ingredients is the caffeine.

How much would you need to be fatal?

Caffeine affects everyone differently, which is why some coffee addicts are able to down three cold brews before work and be fine, and other weaklings are reduced to shaking in the fetal position after one shot of espresso. The more caffeine you ingest, the more you develop a tolerance (and a mild dependence) to it, so it becomes harder to elicit that jolt of energy with each dose.

Even for the most caffeine-dependent person, there are still side effects that set in after too much -- usually more than 300mg (about three cups of coffee). Signs you've gone overboard are the usual suspects, like nervousness, jitteriness, and heart palpitations.

But to reach the fatal levels of caffeine intoxication, someone would have to take in 10g, or 10,000mg. That's when the really scary stuff starts to set in.

"Your blood pressure, your heart rate, your temperature all go up *really*, really high," says **Dr. Adam Splaver**, clinical cardiologist and co-founder of [NanoHealthAssociates](#). "You can go into cardiogenic arrest, and shock, and die. Some people can even have a heart attack." All from a totally legal drug.

So is it possible to die from energy drinks?

It's technically possible, but to reach the 10g level of caffeine would require a *lot* of energy drinks. One 8.4oz Red Bull contains 80mg of caffeine, so it would take 125 cans of Red Bull to overdose on the caffeine alone. That's 1,050oz of liquid; considering fatal water intoxication occurs after around 6 liters (about 202oz) in a short period of time, it seems the liquid would kill you before the caffeine, right?

Not quite, says **Dr. Splaver**; water intoxication occurs when the body experiences a sudden dilution of electrolytes due to the massive intake of water. Energy drinks contain electrolytes, so water intoxication may not apply.

What about the sugar? Most energy drinks are packed with copious amounts of sugar -- that 8.4oz can of Red Bull has a whopping 26g. You know sugar is bad for you for a whole host of reasons, but **Dr. Splaver** says it's actually pretty tough for a healthy person with a normal pancreas to go into what's called a hyperglycemic coma from too much of it.

If you're diabetic, on the other hand, the high sugar content would kill you before the caffeine, although both together are a bad combo. "Diabetics are at a higher risk of cardiovascular disease," **Dr. Splaver** warns. "So you're kind of playing with matches... if you're overdoing it with sugar, and of course the caffeine."

For a normal, healthy person who could literally stomach up to 125 cans of Red Bull, it would be the 10g of caffeine that would be the kiss of death, **Dr. Splaver** insists, not the sugar or the water. He adds that energy drinks are fine "once in a blue moon," but a couple cups of coffee would be a healthier alternative.

Moral of the story: It *is* possible to OD on energy drinks, but it takes a LOT. Like, more than any human could probably ingest at once. Just be careful of the more caffeine-concentrated energy shots, pills, and beverages. The negative effects of caffeine start appearing at around 300mg to 500mg, and ingesting any more will just make you feel sick. Plus, nobody will want to be around you if you've turned into a shaking ball of anxiety.

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