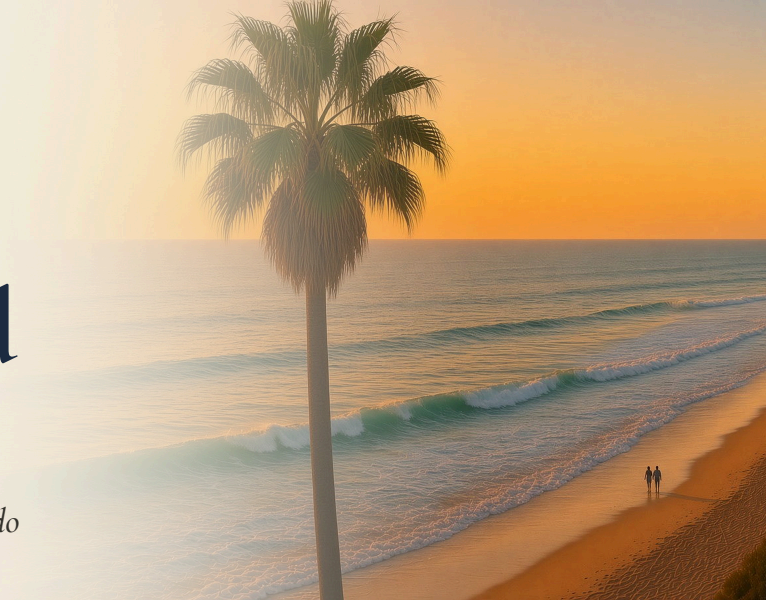
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Energy Drinks and Your Heart

Caffeine plus a stack of other compounds, and what they can do to heart rhythm and blood pressure.

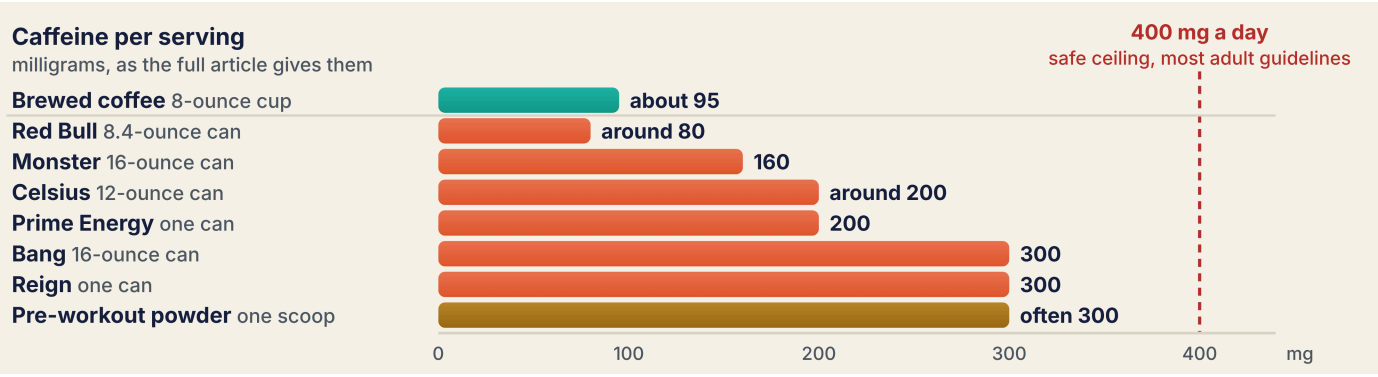
300 mg
caffeine in a 16-ounce can of Bang, versus about 95 in a cup of coffee

400 mg
caffeine a day, the safe ceiling in most adult guidelines

1 to 2
weeks for most rhythm symptoms to settle after stopping

MORE THAN COFFEE IN A CAN

Caffeine plus a stack of other compounds



Energy drinks also carry taurine, often 1,000 milligrams a can or more, and guarana, which is itself a caffeine source and not always counted on the label. Sugary versions hold 50 to 60 grams of sugar a can. Energy drinks consistently cause more changes in heart rhythm and blood pressure than the same dose of caffeine given alone. Caffeine content changes, so check the can.

WHAT THEY DO TO THE HEART

Rhythm, the electrical reset and blood pressure

1 Jumpy upper chambers
High-dose caffeine and the rest of the stack act on the adrenaline-sensitive atria, the top chambers. In a heart already a little prone, they can flip into atrial fibrillation (AFib).

2 A longer reset
In healthy volunteers, 32 ounces of an energy drink lengthened the recharge after each beat. That is risky for people with long QT syndrome, who may not know they carry it.

3 Higher blood pressure
In healthy young adults the top number can climb 5 to 10 points within an hour and stay up for several hours, more than after a cup of coffee.

Cutting back comes first

Palpitations, a racing heart, poor sleep and feeling wired but tired are warning signs. Most of the rhythm problems seen in clinic from energy drinks are completely reversible when the drinks stop.

KNOW YOUR RISK

Who should be careful, and when to get checked

GET EVALUATED PROMPTLY

Call 911	Fainting, especially during exercise, or chest pain. Caffeine may be the trigger, and it does not explain the symptom away.
Palpitations	Palpitations that last more than a few minutes.
Near-fainting	Near-fainting, especially during exercise.
Breathing	Shortness of breath that is new.

GET EVALUATED SOON

in the next week or two

Daily palpitations	Palpitations every day, even if they are brief.
Family history	A parent, sibling, aunt, uncle or cousin who died suddenly at a young age, especially during exercise, sleep or after a startle.
A known heart condition	Any known heart condition, if you have been using energy drinks regularly.

RISKY COMBINATIONS

Alcohol	The energy drink masks the sedating signal, so people drink more and stay up longer with a high heart rate. A vodka Red Bull at 1 a.m. after a night of drinking is one of the more reliable ways to put a young heart into AFib.
ADHD stimulants	Methylphenidate and amphetamine salts already raise heart rate and blood pressure. If you take a prescription stimulant, the energy drinks need to come out. Talk to your prescriber about caffeine.
Pre-workout powder	Often 300 milligrams of caffeine a scoop plus beta-alanine, yohimbine and other stimulants. A scoop and an energy drink in the same morning is a stacked dose that can land in the danger zone for a young heart.

MOST AT RISK

Hidden rhythm conditions	Inherited conditions such as long QT syndrome. An energy drink can be the trigger that uncovers a hidden problem.
Structural heart issues	Even mild ones, such as hypertrophic cardiomyopathy (a thickened heart muscle) or a bicuspid aortic valve.
Anyone under 18	The American Academy of Pediatrics suggests no energy drinks at all for teenagers. A 200 milligram can of Prime Energy is more than most teenagers should get in a day from any source.

BRING A LIST

Every caffeinated and stimulant product you take, including pre-workout powders, ADHD medications and supplements. If symptoms persist more than one to two weeks after stopping, something else is usually going on and needs evaluation.

READ THE FULL ARTICLE

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energy-drinks-heart-arrhythmia

For education only, and not a substitute for advice from your own physician. Sources include Shah et al. (JAHA 2019), Goldfarb et al. (Am J Cardiol 2014), the American Academy of Pediatrics (Pediatrics 2011), Sanchis-Gomar et al. (Can J Cardiol 2015) and Voskoboinik et al. (JACC EP 2018).

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