

Dr. Broman: Caffeine Has Clearly Been Linked To Adverse Events and Toxicity

by Tim Ditman
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United States Sen. Chuck Schumer is asking the Food and Drug Administration (FDA) to look into PRIME Energy drinks, a product of entertainers Logan Paul and KSI. The senator claims the drinks are high in caffeine and are marketed to children, possibly leading to dangerous health outcomes. The people behind PRIME have defended the product.

Politics aside, the issue of what young people put in their bodies is something to be aware of, says [Michael Broman, PhD, MD](#), an OSF HealthCare cardiologist. In fact, it's one he thinks about daily.

“My children are 8 and 10. I don't allow them to have caffeine except under my supervision and only in very small doses,” Dr. Broman says sternly.

Caffeine basics

Dr. Broman says energy drinks, when consumed properly, can provide the desired energy boost. A college student studying for a test, for example.

But it's caffeine consumption that you must be aware of.

“Caffeine has clearly been linked to adverse events and toxicity when given at a high enough dose,” Dr. Broman says.

The effects of caffeine will vary from person to person. Some will be more sensitive to caffeine due to genetics. Others may be able to break down caffeine more quickly, meaning less sensitivity.

Generally though, Dr. Broman says taking in too much caffeine could lead to your heart racing, nausea, vomiting, diarrhea, chest pain and high blood pressure. You may also feel hyper and not able to sit still.

“Caffeine also causes dependence,” Dr. Broman adds. “As a person uses more and more over time, they start to miss it when they don't have it. They can withdraw from caffeine.

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What to know

Here's the formula to remember: Dr. Broman says for children and adolescents, limit daily caffeine consumption to 2.5 milligrams per kilogram of body weight. (You can easily find a [pounds to kilograms converter](#) online.)

For example, if a high school student weighs 120 pounds (or around 54 kilograms), they would want to stick to 135 milligrams of caffeine per day. One PRIME Energy drink has 200 milligrams of caffeine. A 20-ounce bottle of Coca Cola has 57 milligrams. Caffeine content in coffee can vary. So be vigilant about your health and seek out the numbers. Check the product label or look up the product online before you swing by the drive thru or go to the store.

The formula, though, doesn't mean two bottles of Coke or a half swig of PRIME per day will yield no consequences for a 120-pound teenager. Rather, Dr. Broman recommends people under 18 not ingest caffeine regularly at all. Parents, teachers and coaches should watch what young people are drinking. Make the energy drink or soda a once-in-a-while treat. Water flavored with fresh fruit can be an alternative or talk to a dietitian about what's right for you.

"A lot of these caffeinated beverages are marketed and flavored to taste good for children," Dr. Broman says. "The drinks may also be in the store displays right next to the non-caffeinated beverages. They can look almost the same. So, it's often difficult for a young person to figure out, 'Is this beverage caffeinated? Is this one non-caffeinated?'"

And remember, everyone reacts to caffeine differently. Like any other ailment, know your health history and how your body responds to things. If you have significant symptoms from a caffeine overdose, call 9-1-1 and take an ambulance to the emergency department.

"People with prior cardiac conditions are way more likely to have very dangerous side effects from the use of caffeine," Dr. Broman says.