

The pros and cons of daily caffeine intake

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Dr. Sherece Fields, a clinical psychologist and professor in the Department of Psychological and Brain Sciences at Texas A&M University, says caffeine should be ingested in moderation and with caution. Credit: Michael Miller/Texas A&M AgriLife Marketing and Communications

Whether it's brewing a cup of coffee at home, ordering a specialty \$6 latte from a local coffee shop or cracking open a Red Bull on the way to the gym, the consensus is clear: The prevalence of the caffeinated beverage industry continues to grow. According to the [National Coffee Association's Coffee Impact Report](#), the coffee industry employed 2.2 million people and generated more than \$100 billion in wages in 2022.

Caffeine—most commonly found in and associated with coffee, black and green teas, [energy drinks](#) and some dietary supplements—is ingested with the goals of increasing energy levels and boosting alertness along with motivation. However, regularly ingesting high amounts of [caffeine](#) has the potential to develop into a dependence and can induce feelings of anxiety as well as insomnia while also exacerbating some mental illness symptoms.

Dr. Sherecce Fields, a [clinical psychologist](#) and professor in the Department of Psychological and Brain Sciences at Texas A&M University, says it's important to remember that caffeine is classified as a stimulant drug and should be ingested in moderation and with caution.

"Caffeine is in a similar class as drugs like cocaine and methamphetamine and behaves in a way that increases activity in dopamine neurons," Fields said. "All of the things that are related to how it improves things like cognition and memory are related to its stimulant effects."

According to the National Library of Medicine, stimulant drugs function by increasing the activity of the central nervous system. Specifically, they activate neural pathways connecting the brain and the body, contributing to feelings of euphoria and focus and creating a cognitive edge.

At the correct dosages, caffeine can provide benefits to athletes and students by respectively increasing muscle speed and improving levels of focus.

"Caffeine is very popular with athletes because it can increase things like muscle speed, muscle efficiency and can reduce fatigue as it stimulates the peripheral nervous system to get up and get out," Fields said. "A lot of individuals with undiagnosed attention-deficit/[hyperactivity disorder](#) (ADHD) will also use caffeine to help them focus because it acts in a similar way to some ADHD medications."

Despite these benefits, caffeine is a substance that should be ingested and monitored carefully, and should never exceed the daily amount of 400 milligrams, as recommended by the [Food and Drug Administration](#).

"For individuals who consume quite a bit of caffeine, when they stop, they usually have increased anxiety or a depressed mood," Fields said. "For someone who is suffering from a mood disorder like major depressive disorder or a generalized anxiety disorder, it can certainly exacerbate those feelings."

Fields notes it becomes especially dangerous for individuals with underlying [health issues](#) like [high blood pressure](#) and inadequate heart health, as highly caffeinated beverages consumed without a level of caution can cause health complications.

These instances can even make their way into a courtroom, as in the case of Panera Bread's three lawsuits surrounding their highly caffeinated "charged lemonades." These drinks contain more caffeine than a 12-ounce Red Bull and 16-ounce Monster energy drink combined. After consuming multiple refills of the drinks, two individuals died, while a third faced permanent health complications. Each had underlying health problems that made them sensitive to caffeine.

The multifaceted question of whether Panera Bread should be held liable for the deaths of these individuals is not easily answered. Fields emphasizes the importance of being a good consumer of information and the ethicality of accurate advertising.

"As a consumer, I try to encourage my students and my own son to be good consumers of information," Fields said. "In Panera's instance, it is important to understand that 390 milligrams of caffeine is pushing the limit, and if you have more than that, it can be quite dangerous, especially if you have hypertension or some other cardiovascular disease."

Being aware of personal limits and a drink's caffeine level are two simple but effective ways to reap the benefits of caffeinated drinks while avoiding the feelings of jitteriness and anxiety that often accompany them.

"Somebody drinking two to three cups of coffee a day exceeds the recommended maximum amount, which can have detrimental effects on your fight-or-flight system, your heart and your digestion," Fields said. "At low doses, caffeine can improve behavior and focus, so the most important thing to consider is finding balance and having the correct dosage for your specific needs."

The bottom line is that caffeine reactions differ significantly from person to person and can provide both health benefits and detriments, depending on the amount. So before ordering that third cup of coffee, remember that more doesn't always mean better.

Provided by Texas A&M University

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