## " need my caffeine!" You pledge your allegiance to the stuff

 every morning (and at noon, three, five...). But what's caffeine really doing to your body? The good and bad news. By Rebecca Traisternot long ago I woke up with the kind of cold that makes your eyeballs throb and your bones ache. I called in sick to work, took a painkiller and went back to sleep. When I awoke around 2 P.M., the eyeball pain was gone, but in its place was a dull ache, as if my brain were separating from my skull. It wasn't the flu: I hadn't had my coffee yet.
As I threw a jacket over my PJs and slogged across the street for a cup of joe, it occurred to me I might have a problem. The fact that I was barely dressed, running a fever and still obeying the java gods might indicate a serious addiction. I was, basically, a junkie in withdrawal.

The glimpse of the jumpy monkey on my back provoked a curiosity: Just how bad is my coffee habit? Should I cut back? I decided to find out.

## Caffeine overload?

For many of us caffeine is more than just our daily doseit's a way of life. From roadside diners to foamy latte
emporiums, there's always a place to get our fix. It's even a status symbol; in the last decade, Starbucks made coffee both ubiquitous and high-end, while coffee shops replaced bars as the places where everybody knows your name.

Caffeine courses through our nation's bloodstream: Nearly 90 percent of the population consumes the stuff. Coffee is by far our most popular fix-it represents 71 percent of all United States caffeine consumption-followed by soft drinks (16 percent) and tea (12 percent). "Caffeine is the most widely used moodaltering drug in the world," says Roland Griffiths, Ph.D., professor of psychiatry and neuroscience at the Johns Hopkins University School of Medicine in Baltimore.
This drug we love works primarily by blocking a chemical called adenosine, which acts as a mild sedative and helps blood vessels expand. The result: After a little caffeine you feel awake and energetic. But without your usual fix, adenosine kicks back in and blood vessels expand again, letting blood surge and sometimes triggering headaches-like the one I endured. About 20 percent of regular users even
experience nausea and flulike symptoms, and these effects can last two to seven days. Even just a night's sleep is enough to send a caffeine "addict" into low-grade withdrawal, Griffiths says. That explains why that first fix of the day is so alluring-and in part why caffeine is so popular.

## Coffee, tea, soda: what they do to your health

With such powerful withdrawal symptoms, you have to wonder whether caffeine could be harming your body. It all depends on how much you're getting. In general, experts recommend keeping it to 400 milligrams a day (about three eight-ounce cups of coffee) or less. More than that has been shown to cause dehydration and trigger anxiety, high blood pressure or insomnia. (Pregnant women should get no more than 200 to 300 milligrams of caffeine a day.)

The good news is most of us drink a more moderate amount-about 200 milligrams a day, according to United States Department of Agriculture data. That's usually enough for a pick-me-up but typically not enough to hurt your health. Even better, moderate coffee drinking may have health perks. Recent studies have shown that your daily java can reduce your risk of high blood pressure and type 2 diabetes. And caffeine in any form has been shown to boost metabolism slightly. It's enough to make one feel virtuous about downing that triple Venti.
Can it really be that our coffee fix is good for us? The answer may be yes, but it's probably not because of caffeine. "It's important to remember that coffee or tea is only about 2 percent caffeine- 98 percent is other stuff that has an impact on your health," says Terry Graham, Ph.D., a caffeine researcher at the University of Guelph in Ontario, Canada. That other stuff may bring the benefits. Tea provides antioxidants that may reduce your risk of heart disease and cancer. Coffee is also loaded with antioxidants and minerals that have been found to improve how the body responds to insulin, a key factor in type 2 diabetes. (Decaffeinated coffee, too, has been found to lower diabetes risk, leading experts to suspect that it's the coffee, not the caffeine, that makes the difference.) Perhaps that's why caffeinated sodas or energy drinks, especially if they have a high sugar content, haven't been found to have such a promising health payoff. A recent Harvard study even concluded that while drinking caffeinated cola may increase the risk of high blood pressure in women, caffeinated coffee may cut the risk, possibly due to its level of antioxidants.

> When I'm not working, I don't drink any coffee, but when I am working, I drink four cups a day, with cream and sugar. -MISCHA BARTON

# Caffeine close-ups 

## HOW CELEBS GET

 THEIR FIX

It makes sense that coffee is nutritious, since it's a fruit of sorts: Coffee beans are actually seeds from the cherrylike fruit of a coffee plant. But sadly you can't count coffee as one of your five-a-day, says Joe Vinson, Ph.D., a chemistry professor at the University of Scranton in Pennsylvania, who conducted a study on antioxidants. "People like a rationale for doing what they do, and they drink a lot of coffee," he says. "We need a spectrum of chemicals from different foods, like fruits and vegetables, dark chocolate and red wine."

## The downsides of your daily dose

There's another caveat: You can cancel out any potential upsides to drinking coffee or tea-and then some-if you're taking yours with lots of half-and-half, whipped cream, caramel syrup or other high-cal extras. "Think of it like this," says Barry Popkin, Ph.D., a professor of nutrition at the University of North Carolina at Chapel Hill. "If you drink a Frappuccino every day for two weeks, you're adding enough calories to gain a poundassuming you don't eat less food or exercise more." To avoid unhealthy weight gain, experts recommend drinking coffee or tea unsweetened and with skim milk. When it comes to sodas, go for diet, suggests Popkin. Also know that sensitivity to caffeine varies. "Some people may feel fine getting 400 milligrams a day while others may feel ill effects from much less," says JoAnn E. Manson, M.D., chief of the division of preventive medicine at Brigham and Women's Hospital in Boston. One explanation may be that some individuals-and I must be one of themcan metabolize caffeine as much as 10 times faster than others, meaning the double espresso that barely affects me could leave someone else wired for hours. Generally, when thinking about how much is right for you, if you're sleeping well and don't feel jittery or have a rapid heart rate, the amount you're drinking is probably fine. Likewise, you've probably crossed that line from moderation to excess if you feel shaky, irritable, have palpitations or you can't sleep.

How much you regularly get also affects sensitivity, since you can build up a tolerance to caffeine. "Your body adapts to the amount you consume," says Laura Juliano, Ph.D., a researcher and psychologist at American University in

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say c-h-e-e-s-e, say it in white. Chew Trident White ${ }^{\circ}$ and your teeth may whiten in as little as four weeks. Chewing two pieces of Trident White after eating and drinking helps prevent stains and strengthen teeth.


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Washington, D.C. "A person who has caffeine for the first time feels a more intense effect than someone who's had five cups a day for 10 years, and over time some regular users may need more to feel the same effects."

Knowing your caffeine tipping point is key for other reasons, too-your intake could be affecting you in ways you don't realize. "Insomnia rates in this country are high, and I see people medicating themselves for it, but they often don't think to cut caffeine," says Juliano. "And for people with anxiety problems, cutting down on caffeine may help them, too." We may be better off "using" caffeine when we need a mental boost, like on an overnight drive, says Julianoinstead of getting hooked on it and then growing immune to its powers. Harvard research also found that taking frequent, smaller doses of caffeine throughout the day (the equivalent of
a quarter cup of coffee) helped people stay alert even after 16 hours.

So where does this leave me? With a perfectly normal and basically harmless affection (addiction is such an ugly word) for coffee-an affection that, if not fed, will produce a throbbing headache and a very bad mood. But as long as I don't drink enough to give me insomnia, or add the whipped cream that will up my body mass index, it's a habit I'll happily and guiltlessly keep.
I've learned that this moderation stuff comes down to listening to your body-often the leading authority on what's good and bad for you. "It's just common sense," Popkin says. It's 2 P.M., and my common sense is telling me it's time for a second cup. I'll love every sip and then call it quits.

Rebecca Traister is a coffee lover (milk, no sugar) who writes for salon.com in New York City.


