

The Caffeine Conundrum: How Much Is Too Much?

For most people, caffeine is safe in moderate amounts, but an overload can cause unwanted side effects.

If you have heart disease or high blood pressure, you might be concerned about drinking caffeinated beverages. In fact, some physicians recommend that heart-disease patients, including those with or at risk for irregular heart rhythms (arrhythmias), avoid caffeine.

However, according to an analysis published in the April issue of the *American Journal of Medicine (AJM)*, in most people, "caffeine in moderate doses is well tolerated, and there is therefore no reason to restrict ingestion of caffeine."

Nevertheless, when it comes to caffeine, moderation matters. And if you're sensitive to caffeine's effects (e.g. it causes heart palpitations or sleep problems), it's time to cut back.

"Caffeine is relatively safe, even in patients who have a history of heart disease or arrhythmias," says Raul Seballos, MD, vice chairman of Cleveland Clinic's Department of Preventive Medicine. "But I caution moderation, with an emphasis on significant moderation for those who experience symptomatic palpitations or sleep disturbances historically induced by caffeine."

CAFFEINE'S EFFECTS

The average American consumes about 250 mg of caffeine per day. The average half-life of caffeine is about five hours. In moderation, caffeine can be beneficial. It can improve concentration and focus, and combat headache and fatigue. Higher doses may cause negative side effects, such as fast heart rate, upset stomach, anxiety, irritability, restlessness, muscle tremors and insomnia.

Some research suggests that men are more susceptible to these effects than women are. Evidence also shows that people who drink caf-

COUNTING CAFFEINE	
Beverages	
Source	Caffeine (mg)
Starbucks brewed coffee (grande size)	320
Monster Energy drink (16 oz)	160
Coffee (generic, brewed, 8 oz)	102-200
Tea (brewed, 8 oz)	40-120
Espresso (generic, 1 oz)	30-90
Red Bull (8.3 oz)	80
Mountain Dew (12 oz)	71
Coca-Cola Classic (12 oz)	35
Pepsi (12 oz)	38
Nestea (12 oz)	26
Hot cocoa (8 oz)	3-13
Coffee (decaffeinated, brewed, 8 oz)	3-12
Foods	
Ben & Jerry's Coffee-Flavored Ice Cream (8 oz)	
	68
Hershey's chocolate bar (1.55 oz)	9
Hershey's Kisses (9 pieces)	9
Over-the-counter drugs	
NoDoz (maximum strength, 1 tablet)	200
Vivarin (1 tablet)	200
Excedrin (extra strength, 2 tablets)	130
Anacin (maximum strength, 2 tablets)	64

Source: Center for Science in the Public Interest

feine infrequently are more sensitive to its effects than habitual users are.

Caffeine may cause temporary spikes in blood pressure (usually resolving within four hours), as evidenced by an analysis of trials presented at an American Society of Hypertension meeting in May. The study suggests that hypertensive patients with poorly controlled blood pressure should avoid large doses of caffeine, but for those with good blood pressure control, "there is no evidence to justify avoidance of habitual caffeine consumption," the study's lead author said. Also, avoid caffeine before checking your blood pressure at home.

Based on their review of the evidence, the *AJM* study authors noted that caffeine appears to have minimal

to no effect on coronary artery disease or stroke. However, they noted that patients who report arrhythmias triggered by caffeine intake probably should abstain from caffeine.

"If a guy is a long-term non-caffeine drinker, I'm not going to tell him to start drinking coffee," Dr. Seballos says. "But if he's a habitual user, I tell him that one to three cups a day will be fine."

HOW MUCH ARE YOU GETTING?

In general, restrict your caffeine intake to about 200-250 mg a day. It may not take much to exceed that threshold. "The serving size is important," says Laura Jeffers, RD, LD, with Cleveland Clinic's Department of Nutrition Therapy. "People are surprised that an 8-ounce cup of coffee is not that big. It's important to know that two 8-ounce cups have about 200 mg, and that's not including all the other caffeine you're having throughout the day."

If you want to wean yourself off caffeine, do so gradually to avoid withdrawal symptoms, such as headaches, drowsiness and irritability.

Realize that some caffeine sources, such as coffee, green and black teas, have more nutritional value than others, such as sugary sodas. Do not add sugars and syrups to your morning brews, and avoid energy drinks, which typically contain high amounts of caffeine and other ingredients that have similar stimulating effects, Jeffers advises.

If you're drinking four or more cups of coffee or other caffeinated beverages a day, ask yourself why, Dr. Seballos says. If it's to counter excessive daytime sleepiness, you may have a sleep disorder that warrants a medical evaluation. Too much caffeine, especially later in the day, may contribute to your sleep problems.

"Instead of caffeine, focus on increasing your activity to promote energy," Jeffers adds. "If you need caffeine because of how tired you feel, try to get that good feeling in other ways, like exercise." ■

