



Watch Your Caffeine Intake

A cup of coffee in the morning or during work hours has become engrained in today's culture. According to the Mayo Clinic in Rochester, MN, 9 out of 10 Americans consume some type of caffeine on a regular basis, making it the most popular behavior-altering drug.

But how safe is caffeine? Several studies have been conducted, some of which cite the health benefits while others cite the ill effects of ingesting the drug. It can increase alertness and is rarely fatal, but abuse can lead to illness.

Food or Drug?

"Part of the problem is that people do not think of caffeine as a drug, but rather as a food product," said Danielle McCarthy, M.D., a researcher at Northwestern University in Evanston, IL.

Caffeine is a central nervous system stimulant that in moderate doses can increase alertness, according to Johns Hopkins Medicine in Baltimore. However, caffeine also can cause nervousness, increase the time it takes to fall asleep and reduce fine motor coordination.

Some evidence points to caffeine carrying a risk of physical dependence, complete with withdrawal symptoms such as headaches, fatigue and muscle pain after only a day, Johns Hopkins researchers said.

According to health experts, between 200 and 300 milligrams of caffeine – about two to three cups of coffee – is not harmful. Some studies have even shown coffee to have health benefits, including one published in the American Journal of Clinical Nutrition (Vol. 85, No. 2) that concluded habitual intake of caffeinated beverages protects against heart disease deaths among the elderly.

But going over the recommended 300 milligrams of caffeine daily can have adverse effects. According to the Mayo Clinic, more than 500 milligrams a day could cause irritability, nervousness, anxiety, insomnia, headaches and diarrhea. It's not hard to go over the suggested caffeine-intake limit: One 16-ounce cup of Starbucks coffee has 259 milligrams, according to the Mayo Clinic, so just two cups equals what the clinic calls "excessive caffeine."

Abuse and Overdose

The lethal caffeine level is extremely high – the equivalent of 80 to 100 cups of coffee in one sitting. But other sources of caffeine, like pills or supplements, can lead to illness if abused or combined with other drugs.

Caffeine pills and supplements have been popularized by college students, truck drivers and shiftworkers, all of whom use the drug's boost to stay awake longer and fight off fatigue. A recent study by researchers at Northwestern University examined three years' worth of calls to the Illinois Poison Center in Chicago.

More than 250 cases came into the center reporting medical complications from caffeine supplements, of which 31 were patients requiring hospitalization (20 of whom were admitted to the intensive care unit). Study researchers focused primarily on caffeine medications or dietary supplements, not on coffee or tea products.

In 186 of the cases, caffeine abuse was reported as the lone component. In 81 cases, caffeine was



reported as the lone component. In 81 cases, caffeine was combined with other pharmaceutical products, which was significantly associated with hospitalization, according to the study. The average age of the victims was 21. "We want people ingesting caffeine pills and supplements to know that caffeine is a drug, and overuse is potentially harmful, especially when mixed with other pharmaceuticals for euphoria. There is a trend in the pro-drug culture toward promoting legal alternatives to illegal drugs, and it can be very harmful," researcher McCarthy said.

Energy drinks, which contain large doses of caffeine, also have become popular recently, as has combining them with alcohol. But experts warn that doing so increases the risk of dehydration while the caffeine can mask how intoxicated a person actually is.

Curbing Caffeine

If you believe you might be too dependent on caffeine, it might be time to reduce your intake.

The Caffeine Awareness Alliance – a Royersford, PA-based nonprofit organization that seeks to educate and reduce the harm associated with caffeine abuse and addiction – offers several tips to reduce caffeine intake:

- Plan to quite on a Saturday or Sunday, as most people drink less coffee on the weekend.
- Gradually reduce the amount of coffee you consume.
- Substitute caffeine-free beverages.
- Prepare for withdrawal symptoms.

The Mayo Clinic also recommends checking the amount of caffeine in the food, beverage and over-the-counter medications you consume. Brew tea for less time – or drink herbal tea – and switch to caffeine-free versions of pain relief and headache medications.

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