

CAFFEINE!

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If you start your morning with a cup of joe, you're not alone. Caffeine is America's favorite psychoactive drug, with an astounding 80% of adults admitting to its daily use. In comparison, only half of American adults admit to having an alcoholic beverage in the past month. What is caffeine and how does it work? What are the benefits and risks to caffeine usage? And is there such a thing as too much caffeine?



Caffeine is a natural stimulant and is found naturally in more than 60 plants, although we most frequently see it in coffee beans, tea leaves, and the cacao used to make chocolate. Caffeine is also added to man-made products such as soda, energy drinks, and some medications.

Caffeine's main action is in the brain. As the day progresses, our body releases adenosine, which is a neurotransmitter that makes us feel tired as it accumulates. Caffeine blocks adenosine from attaching to its receptor and acts as a natural stimulant that helps to increase mental alertness, focus, and concentration. The effects of caffeine may present as quickly as 15 minutes but can last as long as four or more hours.



Modest consumption of caffeine is considered to be less than 400mg per day, which would be found in 2-4 cups of coffee. In addition to the short term benefits of wakefulness and concentration, modest caffeine consumption is associated with long term health benefits to include a decrease in the risk of Parkinson's Disease, Alzheimer Disease, cirrhosis of the liver, gout, type 2 diabetes, and certain forms of cancer. Some studies have even suggested a decrease risk of death from all causes.

High-octane beverages Caffeine is the new ingredient of choice for beverage companies. How high-energy drinks compare with coffee:



Heavy consumption of caffeine is considered to be greater than 400mg per day and may cause short term adverse reactions to include headache, anxiety, tremors, and insomnia. Long term, heavy consumption may cause cardiac arrhythmias which are electrical disturbances of the heart.

Daily intake of caffeinated products can also produce mild withdrawal symptoms if discontinued abruptly. Withdrawal symptoms include headache, fatigue, drowsiness, and irritability. These symptoms can start in less than a day without caffeine intake and may persist for a week or more following discontinuation.

Although safe for most people, a few special populations must be mindful of their caffeine intake. Pregnant woman should limit their caffeine intake to less than 200mg, as caffeine does cross the placenta and excess usage may result in miscarriage or low birth weight. With the popularity of energy drinks, children are consuming an increasing amount of caffeine. Children may be more sensitive to caffeine and may have increased irritability or anxiety. In addition, many energy drinks have excessive amounts of sugar which is also harmful. Finally, people who drink must know that caffeinated products cannot “sober you up.” Reaction time and judgment remain impaired.

So next time you are pouring that second cup of coffee, there is no need to feel guilty. Enjoy your morning pick-me-up and remember that you are promoting your good health.



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