

Caffeine: Friend or Foe?

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Americans have a love affair with caffeine. We consume it in coffee, soda, tea, energy drinks and even chocolate. Caffeine affects our mood, stamina, cardiovascular system, gastrointestinal tract, and many other body systems. Recently there has been much controversy regarding the positive and negative affects of caffeine consumption on long-term health. Here is a summary of some of the latest research findings and recommendations from health experts:

Effects on Sleep

Consuming caffeine within three to five hours of bedtime can disturb sleep and lead to frequent awakening during the night, reducing restorative sleep. Research shows a relationship between lack of restorative sleep and increased risk for weight gain and chronic conditions such as heart disease and diabetes. Experts recommend limiting caffeine consumption to early in the day, to ensure sleep is not disrupted.

Mental and Emotional effects

Caffeine has been shown to improve short-term memory and speed up reaction time. Caffeine can also increase feelings of well-being, happiness, and sociability. One study reported that women who drank at least two cups of coffee per day were about 60% less likely to commit suicide than those who drank none.

Effects on Weight Loss

Though caffeine is included in many weight loss supplements, the research on caffeine and weight loss has been inconclusive. In studies showing weight gain, caffeine consumption may have increased cortisol levels, promoting stronger cravings for carbohydrates and fat. Though caffeine can increase metabolism, the effects on long-term weight loss are not significant. This may be due to the fact that the effects of caffeine can weaken over time as people develop an increased tolerance.

Cardiovascular Effects

Drinking caffeine every day can raise blood pressure by an average of two to four points, though the rise appears to be temporary. Still, some experts question the safety of repeated elevations in blood pressure and increases in the body's stress response that accompany long-term caffeine intake.

Caffeine and Physical Performance

Caffeine promotes fat utilization and blunts the perception of pain. Both these factors can boost endurance performance. Recent studies also suggest that caffeine may provide a benefit during anaerobic exercise, such as weight training or short distance sprinting. Response to caffeine during exercise can vary, with some individuals experiencing feelings of anxiety and gastrointestinal distress.

Caffeine and Dehydration

Caffeine does not act as a diuretic when consumed in moderate amounts, but can have a diuretic effect when consumed in larger quantities. Based on this evidence, medical experts agree that moderate amounts of caffeinated beverages can contribute to fluid needs in the same manner as pure water. However, water should still remain your primary source of hydration.

Possible Health Benefits

Accumulating research suggests that people who regularly consume coffee or caffeine have a lower risk of developing Parkinson's disease. Coffee drinkers also have a reduced risk of Type II diabetes, though the effects may be due to something other than caffeine. People who drink coffee have about half the risk of liver cancer compared to non-coffee drinkers, though the evidence is too limited to conclude that coffee is actually responsible.

Dangers of Caffeine Abuse

Experts are concerned that caffeine abuse is an emerging problem, since caffeine is being added to more food products. This is especially problematic in adolescents, where medical complications due to caffeine supplements have been on the rise. There is much variation in the caffeine content of food and drinks, and hidden caffeine is a growing danger. The Center for Science in the Public Interest (CSPI) has petitioned the FDA to label the caffeine content of different food products.

The bottom line...

Most experts agree that moderate caffeine consumption – three to four cups of coffee per day – carries little evidence of health risks. Higher levels of caffeine consumption increase risk of physical dependence, and could pose additional health risks. Caffeine response varies widely among individuals, so it's important to be aware of the adverse effects caffeine may have. If you love your coffee, the best advice is to limit your intake, drink it early in the day, and use it wisely during exercise.

Caffeine Content of Common Foods and Beverages

Sources of Caffeine	Caffeine Content (mg)
Starbuck's Coffee (16 oz)	330
Starbuck's Caffe Americano (16 oz)	225
Starbuck's Caffe Mocha (16 oz)	175
Tea (black or green, 16 oz)	60-100
Starbuck's hot chocolate or Decaffeinated coffee (16 oz)	25
Hershey's chocolate milk (8 oz)	5
Mountain Dew MDX or VAULT (20 oz)	120
Diet Pepsi Max	70
Coca Cola Classic (12 oz)	35 mg
Jolt (23.5 oz)	280
Rockstar (Punch, Roasted, or Zero Carb, 16 oz)	240
Full Throttle (16 oz)	144
Propel Invigorating Waters (20 oz)	50
Ben and Jerry's Coffee Heath Bar Crunch (1/2 cup)	40
Starbuck's Ice Cream (1/2 cup)	30
Pitbull Energy Bar (2 oz)	165
Blitz Energy Gum (2 pieces)	110
Jelly Beans Extreme Sport Beans (14 pieces = 1 oz)	50
Hershey's Special Dark Chocolate Bar (1.5 oz)	20
Snickers's Charged (1 bar = 2 oz)	60