

Caffeine



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Everyone Makes a Mark

What is Caffeine?

The chemical compound of caffeine is isolated from coffee plants. Caffeine is available everywhere in the form of coffee, tea, caffeinated energy drinks, chocolate, soda, and common cold medication. According to Health Canada, you should not consume more than 400 mg of caffeine per day.

Source	Amount of Caffeine	Maximum Intake
Cup of coffee	90-150 mg per cup	3 cups
Tea	30-70 mg per cup	6 cups
Cola	30-45 mg per can	9 cans
Chocolate bar	30 mg	13 bars
Redbull	77 mg per can	5 cans
Rockstar	80 mg per can	5 cans
Monster	160 mg per can	2.5 cans

What effect does caffeine have?

Caffeine is a psychoactive stimulant that acts primarily on the central nervous system and brain causing changes in mood, cognition, perception and behavior.

Caffeine is  by post-secondary adult students  because it is expected  that it will keep them awake and alert  even though the individuals are aware that caffeine is highly addictive.

Caffeine can produce symptoms of addiction in individuals by causing their bodies to crave caffeine, causing them to experience irritating withdrawal symptoms (when not taking the caffeine) and has the potential to result in caffeine overdose.

Caffeine overdose  is something that occurs after the consumption of caffeine rather it's something that occurs during the consumption of the caffeine, the symptoms include anxiety, restlessness, bowel irregularities, tremors and tachycardia.

Caffeine has an adverse effect on the heart in the sense that the intake of this stimulant drug results in greater pressure on the heart as it causes the heart's arteries to constrict creating a rise in blood pressure. When there is excessive consumption of caffeine by young individuals (through highly caffeinated energy drinks) they have an increased chance of experiencing irregular heart rhythms and heart attacks.

Caffeinated drinks are harmful on teeth because the high acidity in the drink erodes away the enamel of the teeth. If there is prolonged use of caffeinated drinks, it could lead to significant damage of the teeth.

Taking caffeine with alcohol

The consumption of energy drinks (high in caffeine) alongside or mixed with alcohol has become a popular trend with young people. The consumption of energy shots results in a diminished effect of the alcohol's depressant quality which results in the ability to binge on alcohol without having to stop. A potential outcome of this paired use of alcohol and energy drinks, is alcohol poisoning.

How frequent is misuse?

Due to the easily available sources of caffeine, more and more young people are experiencing the addictive and withdrawal effects of caffeine. There is a recent trend of increased caffeine consumption by young people, their particular choice of caffeine products are coffee, energy drinks, chocolate and soft drinks.

About 51% of post-secondary students reported having at least 1 sign or symptom of withdrawal in relation to daily caffeine intake.

One study in North America found that 90% of adults consumed some form of caffeine on a daily basis.

Effects of regular high caffeine consumption (400 mg/day)

- gastro-oesophageal reflux disease
- gastric hypersecretion - increases risk for ulcers
- excessive urination - should not be consumed during periods of dehydration
- causes sinus tachycardia (severe increase in heart rate)
- can trigger migraines
- poor grades
- decrease performance in classroom
- disruption of coordination in complex tasks
- sleep disorders

Withdrawal effects after high caffeine consumption, on a regular basis

- Headache
- Irritability
- Sleeplessness
- Confusion
- Nausea
- Anxiety
- Restlessness
- Tremors
- Palpitations and high blood pressure