

## CAFFEINE- straight jive about java



Caffeine is one of the most commonly consumed ingredients in world. It is estimated that >90% of adults worldwide consume caffeine daily. Caffeine, in its pure form is a very bitter white powder, and can be found in leaves and beans of over 60 different types of plants.

Caffeine is a psychostimulant that affects chemicals in the brain called Neurotransmitters. When these chemicals are over stimulated, the affects can be felt in many body organs. Caffeine is completely absorbed by the body in about 30-45 minutes, and lasts about 3 hours in the normal body system. Factors that can affect the metabolism of Caffeine are impaired kidney function, age, other chronic illnesses and some medications. Caffeine is excreted through the kidneys, so it is not stored in the body. Caffeine use can cause dependence.

Caffeine decreases blood flow to the brain. People who consume too much caffeine can have symptoms such as nervousness, tremor, restlessness, sweating, irritability, urinary frequency and stomach upset. Many people find it hard to sleep if consuming caffeine less than 3 hours before bedtime.

If too much caffeine is consumed, there may be an abnormal rise in heart rate and blood pressure. Caffeine can decrease the amount of blood that flows to the brain tissue, resulting in reduced intracranial pressure. There is one case report in the literature of death from a fatal dose of caffeine (more than 10 gms).

There is much controversy over how much Caffeine is too much. Although this is still under debate, the following guidelines (from [www.medicinenet.com/caffeine/article.htm](http://www.medicinenet.com/caffeine/article.htm) ) may be helpful:

- Low-mod intake= 130-300mg/day
- moderate intake=200-300mg/day
- High intake= >400mg/day
- Heavy consumption > 6000mg/day

Though coffee is the most common caffeine containing beverage, Caffeine can be found in many surprising places. The list below contains the caffeine content for many common beverages:

- Coke = 47mg/12 ounces
- Coffee (regular brewed) = 135mg/8 ounces
- Mountain Dew= 54mg/12 ounces
- Pepsi= 24mg/8 ounces
- Black tea= 40-70mg/8 ounces
- 7-Up/Sprite= zero
- Orange soda= 41mg/8 ounces
- Starbucks tall coffee= 260mg/ 12 ounces
- Starbucks iced espresso= 75mg/ 12 ounces

- Decaf brewed coffee= 5mg/ 8 ounces

There has been an increased interest in the marketing of high caffeine-containing “energy” beverages recently. These beverages can have an excessive amount of caffeine and should be used with great caution. Some of these beverages have as much as 505mg/can. It is very important to read the serving size, as the amount of caffeine can be surprising. The caffeine content of some popular energy drinks is listed below:

- Red Bull= 80mg/8.5 ounces
- Monster Energy= 160mg/16 ounces
- 5-hour Energy= 138mg/2 ounces
- Vault= 71mg/ 8 ounces

Be very cautious of “energy” capsules- these are poorly regulated and can lead to caffeine intoxication. Some of these capsules can contain up to 200mg/tablet. The amount of caffeine is not always listed on the package label. You should always read the label to make sure, but Caffeine can be hidden in many common foods, such as:

- Hershey’s dark chocolate = 31mg/1.45 ounces
- Special Dark Hershey’s kisses= 24.8mg/9 pieces
- Chocolate syrup= 5mg/tablespoon
- Jolt gum= 33mg/1 stick
- Ben and Jerry’s coffee ice cream= 68mg/8 ounces
- Haagen-Daz coffee frozen yogurt= 58mg/ 8 ounces

There are even some common medications that contain caffeine. Be aware of “diet” drugs that contain caffeine.

- Excedrin x-strength= 65mg/ 1 tablet
- NO DOZ = 200mg/ 1 tab
- Anacin= 32mg/ 1 tablet
- Dristan= 16mg/ 1 tablet
- Midol= 32.4 mg/ 1 tablet

If you are used to consuming caffeine, withdrawing can cause severe headaches, drowsiness, restlessness, irritability and difficulty concentrating. You should never stop caffeine cold-turkey, or you could experience severe withdrawal symptoms. It is best to wean off slowly. Some ways to wean off caffeine are:

- Brew coffee that is ½ caffeine and ½ decaf
- Use a smaller cup
- Avoid energy drinks that contain higher amounts of caffeine
- Drink 1 less cup of caffeinated beverage every three days
- Go for a cup of water instead of soda
- Drink soda without caffeine
- Do not drink any caffeinated beverage after noon
- Reduce the amount of chocolate you eat
- Always read the labels on over the counter medications, as many contain caffeine
- DO NOT mix caffeine with alcohol- contrary to common thought, caffeine is not a cure for alcohol intoxication, and can even make the effects of alcohol more severe. There are increasing cases of caffeine intoxication when taken in excessive amounts with alcohol.
- Avoid “energy” tablets, as these are poorly regulated, and can cause caffeine intoxication
- If you are pregnant, talk with your gynecologist about the safety of caffeine