The Harmful Effects of Caffeine by Lady Carla Davis, MPH

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Caffeine is a bitter, white crystalline xanthine alkaloid that acts as a stimulant drug. It is found in seeds, leaves, and the fruit of some plants, where it serves as a natural pesticide that paralyses and kills certain insects feeding on the plants.

The most common caffeine plant sources are coffee beans and tea leaves. Other plant sources include the kola nut, yerba mate, guarana berries, guayusa, and the yaupon holly.

Caffeine is the most widely consumed psychoactive drug in the world. It is also very addictive. Many people do not realize that the brain actually forms a dependancy on it. In spite of this, it is both legal and unregulated in nearly all parts of the world. Caffeine exists in various amounts in coffee, tea, soft drinks, chocolate, and cocoa. Caffeine products, especially coffee, are among some the worlds largest export commodities. Caffeine is also added to prescription and non-prescription drugs, such as antacids, cold remedies, and pain relievers.

Caffeine is a diuretic, which in turn can deplete important minerals and cause anaemia. It stimulates the central nervous system, the heart, and digestive secretions. It also aggravates ulcers. Caffeine constricts the blood vessels and produces changes in them, which are similar to changes produced by prolonged resentment, hostility, and anxiety.

Caffeine consumption can produce irregular heart beat, hypertension, hair loss, and various other ailments. While caffeine can reduce fatigue, which can be helpful on a short term basis, it can also interfere with sleep and cause insomnia.

Caffeine raises the blood pressure and can contribute to and exacerbate heart disease because it robs the body of the very minerals that protect the heart. An article in the "Lancet" (British Medical Journal) back in 1980, stated that people drinking more than 4 coups of coffee a day have a 50% greater chance of having a heart attack than abstainers.

There has not been as much research on caffeine as there has on nicotine and alcohol. However, a number of studies have shown that 2-3 cups of coffee a day or equal amounts of caffeine from soda, during pregnancy, can result in lowered infant birth weight. Caffeine consumption can also contribute to infertility and birth defects. Couples trying to conceive should abstain from consuming caffeine, because it significantly lowers the ability to conceive. Lower sperm counts, fibroids, PMS, and infertility are common symptoms among people who consume caffeine on a regular basis. Like with all drugs, caffeine should be avoided before and during pregnancy and while nursing.

The high consumption of caffeine from soft drinks is especially damaging to growing children and athletes because it robs them of the much needed nutrients for eye, nerve, mental, and physical development. Caffeine increases intraocular pressure in those with glaucoma. Visual defects, porous bones, and learning difficulties are common symptoms among children consuming caffeinated soft drinks. Many so called "sports drinks" contain high amounts of caffeine and sodium. What parents, coaches and athletes don't realize, is that caffeine can impair athletic performance by interfering with co-ordination. High consumption of these acidic, caffeinated drinks could be a factor in why so many athletes are dropping dead at such a young age. Selling or providing caffeine products in schools is

irresponsible and dangerous and should cease.

In addition, constant caffeine consumption contributes to behaviour disorders and even crime, especially in children and teens. A small amount injected into the brain can bring on convulsions. Caffeine stimulates the adrenal glands to produce adrenaline. Thus, long-term caffeine consumption contributes to adrenal exhaustion resulting in hypoglycaemia and lethargy, along with symptoms of anxiety, paranoia, nervousness, and depression. With 90% of the the global population consuming 120,000 tones of caffeine per annum, it is no wonder that so many people are stressed and suffering caffeine related illnesses.

Caffeine products such as coffee and soda are also highly acidic. When consumed, they force the body to rob vital minerals from the bones, teeth, and other organs, including the heart, in order to balance the body's pH and maintain homeostasis. Hence, over time, heart disease, osteoporosis, arthritis, and joint problems develop. While caffeine-free coffee is a better option, it still contains some caffeine and is also highly acidic. Plus, harmful chemicals are used by some brands in the method of removing the caffeine. To make matters worse, caffeine accumulates in the fatty tissues of the body and is not easily eliminated. Areas particularly vulnerable are the breasts, ovaries, and prostate gland. The accumulation of any drug in the body can contribute to the formation of cysts and tumours. This condition in an overly toxic body, or with a weak immune system can lead to cancer. Some studies claim caffeine reduces some types of cancer, however caffeine can increase the risk of bladder cancer.

From time to time, numerous studies, financed by the industry, are published in an effort to promote the so called "benefits" of caffeine and caffeine products. However, they never divulge the fact that the harmful effects of caffeine far outweigh any claimed benefits.

Like nicotine, the ravage effects of caffeine are a gradual process. Some people may have an immediate bad reaction from caffeine, but most people don't realise there is a problem until the damage is done. Also, many addicted caffeine consumers are in denial. "I just have my one cup a day" is a common claim. However, if summed up over a year, that is 365 cups and a lot of caffeine accumulated in the body.

With the harmful effects of caffeine widely known, why do so many people ingest this drug and even serve it to their children? Perhaps, for several reasons. Caffeine products have been around for a long time and they are addictive. They are also part of an enjoyable tradition, along with social get-togethers, in many parts of the world.

Caffeine was first introduced into Western society in the 17th century, as an alternative drink for rowdy, drunken men spending too much time in the pubs. Some of caffeine's harmful effects were known, even back then. However, big profits and appeasing the church, were more important than the health and well-being of consumers. With major advertising, addictive caffeine products such as coffee and tea, along with chocolate, cocoa, and soft drinks became an accepted tradition in many countries. Eventually, the pharmaceutical companies cashed in on this by providing medicines with the "quick fix." Society became hooked and these industries have prospered ever since.

Eliminating caffeine from one's diet is no easy task because long-term consumption causes brain tissue changes that can lead to dependency. Thus, it may need to be done gradually. Withdrawals of caffeine produces symptoms of fatigue, headaches, and irritability. The time it takes to get rid of this discomfort depends on biochemical individuality. Patience, will power, and persistence will be needed. At the same time, freeing yourself from the

harmful effects caffeine will introduce you to a whole new variety of delightful caffeine-free products. Products that will significantly improve your health and well-being over the long-term.

Tips to help alleviate the discomforting symptoms of caffeine withdrawal:

- . Bring caffeine-free herbal tea bags or bottled water with you when you visit others or go to a restaurant.
- . Drink plenty of pure Spring or pure Vortex Revitalized water (https://www.alivewater.com/) in between meals.
- . Obtain fresh air as much as possible and a minimum of 1-2 hrs. of full-spectrum light and sunshine on a daily basis.
- . Eat a good wholesome, balanced diet for your blood type that includes quality protein for breakfast and lunch.
- . Take a good vitamin C complex, along with a balance of minerals according to your body's requirements.
- . Take Sun Chlorella or spirulina to assist in the detoxifying process.
- . Take Sun Eleuthero to help stabilise the hormones and rebuild the adrenal glands.
- . Take Zeolite to help eliminate toxic substances. zeoliteworks@clear.net.nz
- . Exercise and keep active both physically and mentally.
- . Meditate, beautify your surroundings, listen to soothing music, relax, and do things that make you feel happy.
- . Go for a good therapeutic massage.
- . Seek professional help if needed, such as acupuncture, which greatly helps to overcome addictions, repair tissue, rebalance hormones, and revive the body's electrical system.

Note: Supplement dosage depends on individual requirements. Consult with your nutritionist or health practitioner, if in doubt.

Caffeine Content in Select Foods and Drugs

Product	Serv. Size	Caffeine	per serv. ((mg)	Caffeine	per Litre

Caffeine tablet (regular-strength)	1 tablet	100				
Caffeine tablet (extra-strength)	1 tablet	200				
Excedrin tablet	1 tablet	65				
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Hershey's Special Dark (45% cae	cao content)	1 bar (43 g; 1.5 <u>oz</u>)	31			
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Hershey's Milk Chocolate (11% cacao content) 1 bar (43 g; 1.5 oz) 10						
Cocoa		23				
Chocolate bar, cookie, brownie, candies, ice cream 3-6						
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Percolated coffee 207 mL (7 U.S	S. <u>fl oz</u>)	80–135	386–652			
Drip coffee 207 mL (7 U.S. fl oz)		115–175	555–845			
Coffee, decaffeinated 207 mL (7	U.S. fl oz)	5–15	24–72			
Coffee, espresso 44-60 mL (1.5-	2 U.S. fl oz)	100	1,691–2,254			

Tea – black, green, & other types, – steeped for 3 min 177 mL (6 U.S. fl oz)

	22-74[59][60]	124-416
Instant Tea	31	
Guayakí <u>yerba mate</u> (loose leaf) 6 g (0.2 U.S	S. oz) 85[61]	358 (about)
Coca-Cola Classic 355 mL (12 U.S. fl oz)	34	96
Pepsi	43	
Tab	50	
Mountain Dew 355 mL (12 U.S. fl oz)	54-55	154
Guaraná Antarctica 350 mL (11 U.S. fl oz)	30	100
Jolt Cola 695 mL (23.5 U.S. fl oz)	280	403
Red Bull 250 mL (8.4 U.S. fl oz)	80	320

References:

Wikipedia

ABC online

[&]quot;The Health Builder by J.I. Rodale

[&]quot;The Health Seeker" by J.I. Rodale & Staff

[&]quot;Every Woman's Book" by Paavo Airola, PhD Health Plus Publishers

[&]quot;Food Healing for Man" by Bernard Jensen, PhD B.Jensen Intl.

[&]quot;Food, Teens, & Behavoir" by Barbara Reed, PhD Natural Press "Coffee, Tea or Anxiety" by Earl L. Mindel, PhD

[&]quot;Science News"