



The Hidden Dangers of Caffeine – America’s #1 Drug

This document highlights the hidden dangers of Caffeine extrapolated from “Caffeine Blues”, by Stephen Cherniske, M.S. For a more comprehensive review, backed by research please read “Caffeine Blues”.

Caffeine Causes Elevated Cortisol & a Decrease in DHEA Resulting in a Low Sex Drive and Reduced Immune Response to Disease

DHEA is a vitality hormone produced by our adrenal glands. It is the precursor to other essential sex and youth hormones such as testosterone and estrogen. If DHEA is low we will experience decreased energy, decreased immune competence, immune dysregulation contributing to autoimmune disease, a decreased sex drive and a reduced ability to repair and rebuild tissues.

Research supports that declining adrenal health results in a decrease in DHEA that contributes to adrenopause and aging. Emotional stress combined with stress from caffeine on the adrenals creates such a high need for cortisol that the exhausted adrenals cannot maintain production of DHEA. This results in the double whammy of degeneration: elevated cortisol and DHEA deficiency.

Caffeine Puts Stress on Your Liver

The liver and kidneys typically share in helping to detoxify the body from drugs. With caffeine, the kidneys are unable to get rid of the molecule so it is reabsorbed into the bloodstream before it reaches the urinary tract putting the entire burden on the liver. Further, caffeine contains a host of chemicals, not just caffeine, including a group of extremely toxic compounds known as polycyclic aromatic hydrocarbons (PAHs), These are the cancer causing compounds in barbecued, burnt meats. The liver must also process toxic substances like aldehydes, alcohols and sulfides found in coffee.

Caffeine Causes a Disruption in Adenosine Receptors

Caffeine disrupts the normal function of adenosine receptors, biochemical control switches found throughout the brain, kidneys, gastrointestinal tract, cardiovascular system and respirator system.

Stephen Cherniske, M.S. of [Caffeine Blues](#) writes, “Have you ever inserted the wrong key in a door and found that the key fit just fine but it wouldn’t unlock the door? That’s what caffeine does in an adenosine receptor. It fits, but does not perform the adenosine function. Now imagine that you’re standing there and you can’t get the wrong key out of the lock. You are thus prevented from entering the room. Likewise, when caffeine plugs an adenosine receptor, an important biochemical message that is supposed to be sent to the cell is not delivered. “

In the brain, neuron firing is dampened or slowed down by adenosine receptors. They act like a fuse box to prevent your circuits from getting overloaded. Caffeine inactivates this control mechanism and your neurons keep firing, and firing and firing to the detriment of your health.

Caffeine Stimulates the Production of Epinephrine and Norepinephrine, Stress Hormones that Act on the Brain and Nervous System.

All the uncontrolled neuron firing creates an emergency situation in the body. This triggers the brain to secrete ACTH. ACTH tells the adrenal glands to pump the stress hormones epinephrine (commonly known as adrenaline) and norepinephrine (the stress hormone that acts directly on the brain and nervous system). These hormone levels increase by more than 200% with 2-1/2 6-ounce cups of coffee (which are smaller cups than the standard 8 ounce small cup or 16 ounce large cup sold in most coffee franchises and restaurants). Heart rates go up, blood pressure goes up and a flight or fight response can be triggered.

Caffeine Triggers a Fight or Flight Response that is Killing Us and Keeping Us in a Constant State of Emergency Alert

As mentioned above, the flight or fight response is triggered as the stress hormones go up. When faced with real danger (an attack by a grizzly bear) this response is needed for survival. In a modern world, where the stress we face is due to a busy schedule, freeway traffic, discord with a spouse or boss or a misplaced item this response can create problems because caffeine reduces the brain's problem solving ability and stimulates neuron firing in the primitive part of the brain known as the limbic system. The fight or flight response was designed for episodic events, not the chronic state of stress that we face in a modern world. With caffeine, our bodies are in a constant state of "emergency alert" and the results can be devastating to your health over time.

Furthermore, in most situations the appropriate response to stress is not fight or flight. The stress is tied to sitting at a desk, talking on the phone, reading an email or driving a car. If that is the case, the sugar and fat from food you eat combined with caffeine is dumped into your bloodstream and goes unused. The sugar creates an additional metabolic stress and the fat can clog your arteries. And since the blood flow has been diverted from the gastrointestinal tract the food you ate is converted into a fermenting and putrefied mass.

Caffeine Impairs Digestion and Increases Your Risk of Gastrointestinal Disease

Digestion issues are worsened by caffeine. The jumbo 7-eleven 32-ounce soft drink, the double espresso, the red bull or the multiple cups of coffee are a major contributor to the bloating and gas pain that roughly 50% of Americans experience after eating. These are just the physical signs of mal-digestion. Unseen are the harmful by-products of fermentation and putrefaction whereby these harmful by-products are absorbed or leaked back into the bloodstream, often the very toxins that increase your risk of Irritable Bowel Syndrome (IBS) or gastrointestinal disease.

Caffeine Causes Vascular Restriction Increasing Your Risk of a Heart Attack

Caffeine causes peripheral blood vessels to restrict. This in turn will raise your blood pressure and increase your risk of a heart attack. All blood vessels throughout your body are affected, which means billions of cells are suffering from reduced metabolic efficiency. In addition, less oxygen gets to the cells and less carbon dioxide and other wastes are removed. Further it means vessels in the brain are constricting and cerebral blood flow is reduced.

This is quite dangerous because caffeine also increases brain activity. The combination of less blood flow and oxygen combined with increased brain activity results in hypo fusion, and the consequences, when repeated day after day can be quite serious.

Caffeine Elevates Cortisol Levels

Caffeine elevates cortisol levels, which remain in the bloodstream much longer than epinephrine and norepinephrine. Sleep is diminished, immune systems are adversely affected, age related deterioration is accelerated and there is a gradual, yet significant change in mind, mood and behavior. When used frequently caffeine elevates cortisol levels and these elevated levels contribute to a constant state of anger, frustration and bitterness.

Caffeine Impacts Dopamine Levels in the Brain and Stimulates Opiate Receptors Similar to Opium, Cocaine and Amphetamines, Often Leading to Multiple Addictions

Caffeine acts along similar biochemical pathways, in the same areas of the brain as opium, cocaine and amphetamines. Long-term usage of caffeine artificially increases dopamine levels creating an addiction to the drug. Coffee and Cola drinkers need their fix in order to avoid the negative experiences of headache, fatigue, irritability and depression. Most people will argue there is no comparison between coffee and other drugs. Research supports that there is a continuum addiction and just because one substance is incredibly harmful in the short-term it doesn't mean we should consume or ignore a substance that is moderately harmful and over time can be potentially and extremely harmful to our physical bodies and our mental health.

Caffeine Overworks the Adrenal Glands Resulting in more Allergies, Inflammation, Hypertension, Infection and Fatigue

The adrenal glands contribute to the production of 150 different hormones, each one vitally important to your health and wellness. Some of these hormones manage blood pressure; others manage stress. The adrenals are responsible for maintaining homeostasis (metabolic and emotional balance) during times of stress. With caffeine consumption, the adrenal glands become exhausted and everyday problems become magnified. Once the adrenal buffer to balance is stressed and gone, you are constantly living on the edge of breakdown. Your emotional resilience is reduced to copying and then you become a prime candidate for diseased processes to include allergies, inflammation, hypertension, fibromyalgia, fatigue and autoimmune disorders. You are in a chronic "state of emergency", which is designed for emergency situations, putting your adrenals at work 24/7, with no rest.

Caffeine Impacts Immunity and Aging

Autoimmune diseases such as MS, rheumatoid arthritis and lupus are directly tied to Caffeine and stress. These diseased processes occurred caffeine compromised immunity and accelerated the aging processes in the body.

Caffeine Disrupts the Normal Metabolism of GABA, the Neurotransmitter that Helps You Calm the Mind

GABA is an important neurotransmitter that has a unique ability to calm the mind. It helps you step back so you can see clearly during stressful events. Unfortunately, in today's modern, stressful world, Caffeine disrupts the normal metabolism of GABA and screws up your ability to remain calm or to handle stressful events in a clear, calm and logical way.

Further, about 10 years ago it was discovered that GABA was produced in the gut. Since the normal metabolism of GABA is disrupted by caffeine it has been discovered that decreased GABA metabolism can result in ulcers or irritable bowel syndrome (IBS). Further, the interference of GABA metabolism is amplified by other drugs; including commonly prescribed antibiotics. These medications interfere with the action of GABA and also decrease the body's ability to detoxify caffeine. The combination can produce anxiety, irritability, hyperactivity and in some instances epileptic type convulsions.

Caffeine Combined With Stress Increases and Amplifies a Rise in Blood Pressure, Increasing the Risk of Serious Disease Processes

If one is stressed from modern day activities, to include making a deadline for work or driving in traffic, consumption of caffeine multiplies the increase in blood pressure, increasing the risk of damage and cardiovascular diseases to include heart attacks, strokes, hypertension, rheumatic heart disease and atherosclerosis (hardening or blockage of the arteries).

Caffeine Disturbs Calcium Metabolism

Calcium supplementation or intake of calcium through foods or juicing has been demonstrated to lower blood pressure in 50% of patients. Caffeine disturbs calcium metabolism. In fact, research has demonstrated that after 2 weeks of eliminating caffeine from one's diet, two important measures of caffeine status, serum ultrafiltrable and the parathyroid hormone improved markedly in all subjects.

Caffeine Contributes to a Magnesium Deficiency Often Leading to Coronary Vasospasm

Nearly 25% of heart attacks are not caused by artery blockage but are instead caused by the blockage of blood, and therefore oxygen to the heart. This results in massive cell death and a heart attack. The blockage of blood supply to the heart is known as a coronary vasospasm. When caffeine is consumed, stress hormones release is accelerated thereby lowering one's stress threshold. Situations that otherwise would have been handled become difficult and stressful and with this caffeine induced stress the risk of vasospasm is increased. Further, caffeine contributes to magnesium depletion, a condition that makes arteries more prone to spasm.

Caffeine Raises Homocysteine Levels in the Blood Increasing the Risk of Heart Attack, Stroke, Miscarriage, Birth Defects and Alzheimer's disease

The *American Journal of Clinical Nutrition* published a report in 1977 confirming coffee consumption elevated blood levels of homocysteine. The *Journal of the American Medical Association* (JAMA) concluded that cardiovascular disease risk increases significantly with elevated homocysteine levels in the blood and is "equivalent to high cholesterol or smoking". There are now several hundred studies supporting this fact. Further, as homocysteine levels go up, blood vessels lose their ability to dilate and the result is a rise in blood pressure. The result is accelerated damage, cardiovascular disease and an increase for heart attack and stroke.

The body needs optimal amounts of folic acid, vitamin B-12 and vitamin B-6 to eliminate homocysteine from the blood. Unfortunately, caffeine depletes these vital nutrients. Further, caffeine interferes with the normal breakdown of homocysteine. If homocysteine levels are high, proteins, calcium and cholesterol form the blood form plaque, which ultimately block the arterial walls. Platelets also become stickier and form abnormal clot formations, increasing the risk of heart attack.

The sad news is most cardiologists and western medical doctors are not even aware of the physiological impact of caffeine on their patients and do not understand the importance of doing a nutritional survey including identification of caffeine sources and elimination of caffeine from their patient's diet.

High risk populations for increased levels of homocysteine include diabetics, people with rheumatoid arthritis, people with Alzheimer's disease or other forms of dementia, the elderly (people over 65 years old) and pregnant women.

Caffeine Contributes to Depression, Anxiety and Other Psychological Issues

Research has demonstrated that consumption of caffeine (coffee, sodas, some medications, red bulls and other food items) causes depression, with improvement in symptoms when eliminated for one week or longer. Unfortunately, caffeine puts you on a roller-coaster ride where mental clarity alternates with periods of confusion, depression, cognitive impairment, anxiety and lethargy. Most people don't understand caffeine is the cause of depression because symptoms happen approximately three hours after consumption.

When caffeine is consumed, initially dopamine and serotonin levels are increased, temporarily elevating mood and/or energy. The letdown follows. This is because your dopamine and serotonin receptors, the brain cells associated with excitement have been fired to exhaustion. You will experience a metabolic rebound several hours later, whereby your body must replenish the dopamine and serotonin. This is often the time someone reaches for another cup of coffee or a cola, creating a roller-coaster ride of ups and downs throughout the day. Long-term your body may lose its ability to replenish the neurotransmitters (dopamine and serotonin) and chronic depression may set-in. In addition, you may experience withdrawal symptoms of headache, depression and fatigue, which only compound the depression that occurs when the body is rebounding from neurotransmitter depletion.

Caffeine Disturbs Sleep Contributing to More Depression

Research has shown that 90 percent of patients with depression have disturbed sleep patterns. Further, the sleep disorders are tied to the consumption of caffeine. Further, many individuals are put on anti-depressants to treat the depression versus simply taking them off caffeine. Unfortunately, the anti-depressants also disturb sleep increasing the depression and making people drowsy during the day. The cycle is vicious, caffeine contributes to depression, but, not understanding this, people take anti-depressant medication. Both the drugs and the caffeine disturb sleep, causing people to become lethargic and tired during the day, which causes the individual to consume even more caffeine.

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