Caffeine: Exploring Lawyers' Well-Being Habits

By Robin Oaks

I've had a love-hate relationship with caffeine throughout my forty years of practicing law. I love how a caffeinated drink makes me feel more focused and able to stay glued to my chair while thinking and writing. I hate how if I use caffeine consistently for more than a week, I feel jittery, my digestion feels off, and I toss and turn as I try to fall asleep at night.

I know that many find caffeine to be both enjoyable and beneficial. Overall research has been pretty convincing that coffee is more healthful than harmful in terms of health outcomes.[1] Caffeine use can be a friend or foe, based on quantity, the type of product in which it's contained, and also on the individual metabolic differences among people. Every legal environment I worked in deeply embraced a coffee culture.[2]

Chocolate, which also contains caffeine, doesn't make me feel as wired as coffee or tea (likely because food is metabolized more slowly, and chocolate has less caffeine in it). However, my body sometimes uncomfortably heats up and if I even *look* at chocolate—my waistline seems to expand overnight! (It's true, but I haven't found the science to prove it—yet…)

In the U.S., depending on the study, 85% to 90% of adults daily consume 135 to 200 mg of caffeine. Nearly three out of four Americans drink coffee each day. One 8 oz cup of coffee contains around 100-200 mg of caffeine, and many coffeehouse drinks exceed 300 mg. The safety limit for caffeine set by the FDA is 400 milligrams a day.[3] However, these statistics don't reflect how caffeine affects you individually.

The coffee arabica (coffee) plant and the camelia sinensis (tea) plant produce a chemical, 1,3,7-trymethylxanthine, known as caffeine. Caffeine is classified as a drug because it is a chemical substance that produces a biological effect when given to a living organism. Caffeine addiction, referred to as "Caffeine Dependence" or "Caffeine Use Disorder," is a real thing. It's listed as a condition "for further study" in the *Diagnostic and Statistical Manual of Mental Disorder* (5th ed.) (DSM-5) [4]

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The World Health Organization recognizes the diagnosis of Caffeine Dependence Syndrome, defined as a cluster of behavioral, cognitive, and physiological conditions that typically involve 1) a strong desire to use, 2) persisting in use *despite* harmful consequences, 3) increased tolerance, and 4) possible physical withdrawal symptoms.[5] Caffeine dependence appears to be influenced, in part, by genotype.

As I've learned through my studies of Ayurveda and Chinese Medicine practices, how and whether we metabolize, react to—and enjoy—certain foods, medications, or plant substances depend on many factors, such as "constitution,"[6] genetic make-up, stress responses, and a host of other considerations, including environment (time of year, climate, circadian rhythms). One person's medicine may be another's poison.

Human beings have been using and experimenting with plants to alter consciousness since the beginning of time.[7] When I listened to Michael Pollan's audio book, *Caffeine, How Coffee and Tea Created the Modern World*, he outlined how caffeine affects the mind and body, how coffee and tea spread around the world and was intertwined with imperialism and slavery, and how he ceased his long-term coffee habit to write about his personal "withdrawal" experience. He notes, "I think this is true for any kind of habit. Until you try to break it, you really don't understand its hold on you. It was kind of a challenge."

I recently wrote an article about sleep and how it's the quality, not just the quantity, that matters. Caffeine may affect deep sleep, interfering with the slow brain wave activation process that each night is necessary for detoxing the brain and storing information. I decided to do my own personal experiment like Pollan, but instead of quitting, I started a new habit of using caffeine routinely for a month (I rarely use it, normally). I wanted to mindfully explore its impact on my sleep and wakefulness. Plus, I was planning a trip to visit family on the east coast soon after Daylight Saving. I thought it would be the perfect opportunity to explore how caffeine might decrease my usual jet lag blues as I navigated time zones and changes.

Caffeine Use: A Mixed Bag

For the first couple of weeks of my experiment, I really enjoyed sipping a fresh brewed cup of cappuccino that my brother made for me each morning. The coffee helped me feel awake—and lifted my lethargic mood. My brother, a professional pilot for over forty years, admits that he's been wedded to caffeine (coffee, cola drinks) since he first began his love affair with flying. For many professionals, lawyers included, who often are forced to work out of sync with their body's internal clock (circadian rhythms) while maintaining alertness and focus under demanding conditions, caffeine is a work environment staple.

During one morning coffee klatch, my brother shared well-being strategies that pilots learn as a trick of the trade. Turns out that the FAA (and the DOD) have invested heavily in studying how sleep and other factors, including caffeine, affect human performance. Pilots are taught, among other things, to take scientifically proven "26 minutes afternoon powernaps" to help buffer against sleep deprivation consequences.[8]

Biphasic sleep refers to multiple sleep-wake cycles that humans experience. Certain cultures create afternoon siesta-time to address our genetically hardwired dip of alertness that occurs in the mid-afternoon. This is the time of day in our legal work environments that it's common to take a coffee break—not a nap.

The military has done extensive research about caffeine use to optimize soldiers' performance during military operations.[9] One concern studied is the serious consequences of *not* providing caffeine to soldiers who are routine coffee drinkers because withdrawal from caffeine can impact cognitive and physical functioning. Withdrawal symptoms are generally not long-lasting, but may include headaches, drowsiness, irritability, fatigue, lack of focus and vigor, and flu-like symptoms. Michael Pollen chronicled his miserable withdrawal experience in his book.

During my own caffeine experiment, I felt an unmistakable kick-start to my sympathetic nervous system within minutes of consuming coffee. It enters the bloodstream within fifteen minutes and can start working as quickly as five minutes, although most notice its effects within an hour. My heart rate increased, and I felt a palpable sense of focus, which I interpreted as an energy boost.

I noticed that coffee's unique aroma swiftly became associated with feelings of social connection and a subtle comforting feeling that I could predictably alter my consciousness and alertness—on command. I was forming all sorts of pavlovian-like associations with my morning "java" jolt.

I also became acutely aware of caffeine's power to stimulate *dopaminergic* activity. Dopamine is known as the "feel-good" hormone because it's involved in the brain's reward systems and causes feelings of pleasure, satisfaction, and motivation. Coffee's abilities to release dopamine in the brain's nucleus accumbens may be a specific neuropharmacological mechanism underlying the addictive potential of caffeine.

Although caffeine is a central nervous system stimulant, it doesn't actually increase focus, as much as it contributes to prolonging wakefulness. It blocks endogenous adenosine from connecting to receptors throughout the body. Adenosine causes feelings of fatigue and lack of focus, which helps us with our physiological need to rest. If caffeine is not in the body acting as an antagonist at adenosine receptors, then adenosine slowly builds up, leading one to eventually fall asleep. Scientists have confirmed that every animal species on earth needs sleep to survive—and thrive.

Sipping Deeper

I'm not offering any medical advice in this article about caffeine—or coffee use (you can do your own research and talk to your doctor about any concerns). Instead, I am suggesting that there are benefits to exploring any habit deeper. Habits are repetitive behaviors, often done unconsciously. So, an important first step is to be aware of what you routinely eat or drink, and how it's *really* affecting you.

For instance, although research hasn't found any association between caffeine consumption and hypertension, a physician friend I know discovered that if he gave up his long-time coffee drinking habit, his alarmingly high blood pressure numbers dropped to normal levels. Caffeine is so woven into modern day culture that its effects may remain invisible regarding physical or mental conditions.

A few years ago, a study was published about coffee and mortality rates that caused a big stir in our coffee culture. It showed that people who consumed a cup of coffee a day were twelve percent (12%) *less* likely to die compared to those who did not drink coffee. Lower mortality rates were present regardless of whether people drank regular or decaffeinated coffee, which suggests the association the study found is not likely tied to caffeine specifically.[10]

One reason for the potential benefits of coffee drinking may be due to the presence of a wide range of biologically active polyphenols—chemicals with super powerful antioxidant and anti-inflammatory properties. Coffee is acidic generally, but, using courser grounds or pairing it with alkaline foods, or with milk—and not drinking it on an empty stomach, may help mitigate certain digestive effects. Caffeine is also a potent stimulator of gastrointestinal motility. That's why many people use coffee in the morning to "get things moving."

At low doses, caffeine may positively impact symptoms of depression because caffeine stimulates dopamine, which is associated with good feelings. In addition to ingesting through food and drinks, caffeine can be inhaled, it's in medications and food additives, and it's even been used in enemas (by some claiming it promotes liver detoxication).

Knowing how your coffee is brewed, its source, and how it's been stored is also important. Although coffee has antimicrobial and antibacterial properties, high levels of mold have been detected in certain coffee products that may increase a person's toxic load. Also, coffee made with a French press is associated with a small but significant increase in LDL cholesterol that does not occur typically with filtered coffee.

As one ages or with long-term use (tolerance is another caffeine trait), how something affects us may change. For instance, pregnant women should monitor caffeine intake due to its effects on metabolism and estrogen. As we evolve—so may our sensitivities. Among the variables that may contribute to caffeine sensitivity are genetically mediated stress reactivity and baseline levels of stress exposure (and we all know lawyers routinely work under stress-inducing conditions).

Lawyer Polling Results

To explore how lawyers' caffeine consumption habits compare to national averages, I conducted a (very) informal study asking lawyers about whether they "routinely" consumed 1) "coffee", and/or 2) "anything caffeinated." I sent a few lawyers my yes/no caffeine survey and asked them to then forward it to other lawyers. Fifty-three (53) lawyers responded (and thank you to those who participated!).

The results suggested slightly higher than national averages regarding caffeine consumption, with 92% of the lawyers sampled consuming some form of caffeine routinely/daily; 71 % of the participants reported they routinely drank coffee, which reflects the national average. Of those claiming that they routinely had something caffeinated, 77% identified coffee as their main caffeine source.

Several participants added more details to the yes/no poll, clarifying their individual experiences. A few noted that they only drank one cup of coffee daily, and only in the morning because otherwise their sleep was impacted. Several expressed their fond relationship with a warm caffeinated beverage every day. Some claimed they had no problem consuming caffeine throughout the day, even into the evening.

Choices

Happily, my personal experiment with caffeine didn't result in any serious adverse effects. Adverse effects can happen, such as caffeine toxicity at high doses, creating disorientation, hallucinations, psychosis, seizures, and arrhythmias. Knowing exactly your caffeine source, and how much is consumed, is why the FDA reports on safety issues, especially concerning caffeine-alcohol beverages and energy-drinks containing high amounts.

For me, the cons outweighed the pros about whether I chose to continue using caffeine daily after my month-long experiment ended. Because I don't consume caffeine routinely, I'm an outlier in our legal culture caffeine use study. A formal study might have revealed more nuanced results about our community's caffeine preferences and habits.

Interestingly, Michael Pollan happily chose to return to what he called his beneficial coffee habit after abstaining for three months — although he acknowledged that his quality of sleep improved markedly without caffeine.

I invite you to do the following mindfulness practice. Explore whether your caffeine consumption is helping or hurting your performance as a legal professional—and how it benefits your wellness and well-being. ■

PRACTICE: Mindful Eating/Drinking

If you use caffeine daily or occasionally, choose your favorite caffeinated drink or food and place it in front of you. (If you never eat or drink something caffeinated, then choose any favorite food for this practice.) Take a mindful pause—and notice your breathing.

Now, take a sip of your drink, or a bite of food. Don't engage in conversation with others. Pay attention to the flavors, textures, smells, your mouth moving and any associations that come to mind.

Do a body scan by slowly moving your awareness from head to toe through your body, noticing areas of tension, your heart rate, breathing patterns, or any thoughts that might arise. Take another sip or bite. Note what you witness.

Take a break. Then, sit down again in fifteen minutes. Do another body scan and slowly move your awareness from your head down to your toes. Notice any body sensations or feelings that might have changed.

Consider starting a caffeine diary, recording daily what you feel after drinking or eating something caffeinated. Note the frequency and time of day you consume caffeine. Build an awareness about how your mind-body-energy, sleep, and performance are impacted by what you eat/drink.

Robin Oaks has been an attorney for nearly forty years, and for twenty-five years has provided legal services focused on independent workplace investigations and mediation. She is certified in and has studied a wide range of healing, emotional intelligence, cognitive fitness, and mind-body practices. She is a well-being consultant and offers confidential professional life coaching sessions for legal professionals seeking to optimize potential, restore balance, and thrive during stressful life changes and challenges. Contact: Robin@RobinOaks.com or 805-685-6773.

ENDNOTES

1 https://www.hsph.harvard.edu/news/hsph-in-the-news/is-coffee-good-or-bad-for-your-health/#:~:text=Hu%20said%20that%20moderate%20coffee,their%20risk%20of%20early%20death.

2 Kamil Rodak, et al. *Caffeine as a Factor Influencing the Functioning of the Human Body—Friend or Foe?* (2021); https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8467199/pdf/nutrients-13-03088.pdf

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3 See https://www.ama-assn.org/delivering-care/public-health/what-doctors-wish-patients-knew-about-impact-caffeine#:~:text=About%2085%25%20of%20adults%20consume,source%20of%20caffeine%20for%20adults

4 The DSM-5 added CUD because withdrawal and dependence from caffeine are clinically significant. The APA is not clear that CUD is a clinically significant disorder, so the DSM-5 doesn't include a *diagnosis* for it.

5 Dr. Steven Meredith, Dr. Roland Griffiths, et al, *Caffeine Use Disorder: A Comprehensive Review and Research Agenda*, (2013): https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3777290/

6 According to Ayurvedic Medicine practices, we each have unique constitutional and functional energy patterns called doshas (kapha, pitta, vata) governing physiological and psychological activity. These classifications reflect varieties of physiologic strengths and weaknesses, mental tendencies, and susceptibility to illnesses. Approaching wellness and balancing processes through an understanding of doshas provide a framework for healing and thriving from a *holistic* perspective.

7 For his book, Michael Pollan interviewed Dr. Roland Griffiths, Departments of Psychiatry and Neurosciences, Dir. of Psychedelic and Consciousness Research, and Caffeine Research at Johns Hopkins Univ. School of Medicine.

8 According to NASA, pilots who take 26-minute power naps experience a 34% increase in job performance and a 54% increase in alertness. They feel less sleepy at the end of flights and are less likely to experience microsleeps.

9 Institute of Medicine, *Caffeine for the Sustainment of Mental Task Performance, Formulations for Military Operations*, Washington D.C. (2001) https://pubmed.ncbi.nlm.nih.gov/25057583/

10 Veronica W. Setiawan, lead author of the study is Associate Professor of Preventative Medicine at the Keck School of Medicine of USC; study reported in the *Annals of Internal Medicine*, July 11, 2017 issue.