



# The Wellness Family

Dr. Brayton Keeps You Informed

## Caffeine and Stimulants

According to recent research, caffeine is the most commonly used drug in the world and the World Health Organization has classified caffeine dependence as a clinical disorder. While mild to moderate doses can be considered generally safe, research is showing that a caffeine addiction can be easy to develop and difficult to overcome.

### Caffeine Consumption

Research has shown that in the United States more than 90% of adults use caffeine regularly and the average consumption is more than 200mg per day. To better understand this, that is the equivalent of two 6-ounce cups of coffee or five 12-ounce cans of soda. For regular Starbucks consumers, one Venti Latte and you have already consumed  $\frac{3}{4}$  of your daily allowance.

Caffeine use has been shown to be relatively safe until you are ingesting more than 400mg a day over an extended period of time. Once reaching these high doses it can result in insomnia, nervousness and/or restlessness, stomach irritation, nausea and vomiting, increased heart rate and respiration issues. Larger doses might even cause headaches, anxiety, agitation, chest pain or ringing in the ears.

When consumed in larger amounts during pregnancy, caffeine may increase the risk of miscarriage or other concerns. Additionally, caffeine can pass into breast milk. Nursing mothers should be very cautious about their caffeine consumption, recognizing that it's not just found in coffee but soft drinks, sports drinks and even some food items, such as chocolate.

### Soft Drinks

Right up there with coffee and tea, the most popular source of caffeine is the soft drink. Recent statistics have shown that, although soft drink consumption in the United States has dipped again for the 13th straight year in a row, as of 2018, the average American is still consuming almost 39 gallons of soft drinks a year. Giving credit where it's due, in 2000 (the peak of soft drink consumption), that number was 53 gallons per capita. This is a 25% decrease but it's still incredibly high.

Studies have suggested that part of the reason for the decrease is due to the increased awareness of the health effects of drinking sugary sodas. Public awareness seems to be also reflected in an increase in the consumption of

bottled water. Studies are showing that, as the consumption of soft drinks has decreased, the consumption of bottled water has increased by 150%.

### Sports Drinks

The general purpose of a sports drink is supposed to be to hydrate after being physically active, hence the name "sports" drink, however, they were created for athletes not the average consumer. A standard sports drink contains electrolytes but also carbohydrates in the form of added sugars, either glucose, sucrose or fructose. Typically, the source of carbohydrate is going to be high-fructose corn syrup. The average person that is not physically exerting themselves is going to get more carbohydrates than necessary from a sports drink.



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In regard to caffeine, sports drinks are generally supposed to just help hydrate and replace electrolytes, yet there are several on the market that have added caffeine. A prime example would be NOS Active from Coca-Cola.

Interestingly, sports drinks are not widely known to contain caffeine and so most consumers assume they don't. Surprisingly, NOS Active Sports Drink has 221mg per bottle, whereas the NOS Energy Drink only contains 160mg.

### Energy Drinks

One of the biggest sources of caffeine available for purchase would be the "energy drink". When energy drinks first appeared in the late 1990s and early 2000s, some manufacturers claimed the products were dietary supplements. Drugs with caffeine require warning labels, but dietary supplements don't.

Researchers from the Johns Hopkins School of Medicine stated, "It is a striking inconsistency that, in the U.S., stimulant medication containing 100mg of caffeine per tablet must include warnings, whereas a 500mg energy drink can be marketed with no such warnings and no information on caffeine dose amount in the product."

Sadly, there are in fact energy drinks on the market with 500mg of caffeine, due to the size of the can and additional stimulant ingredients, however, the most common contain between 300 and 350mg per can. These would include Redline, Monster, and Rockstar. Yet, when it comes to energy drinks, the caffeine isn't the only problem.

### Other Stimulants

While the most common stimulant in energy drinks is going to be caffeine, many contain other legal stimulants like ephedrine, guarana, and ginseng. According to the American College of Cardiology many ingredients included in energy drinks are natural, "Guarana and yerba mate, which can be contained as part of the energy blend of energy drinks, are also natural and an additional source of caffeine in these products. As such, the total amount of caffeine in energy drinks may not be accurately reflected on the label."

They also noted, "Energy drinks frequently include significant amounts of carbohydrates (usually glucose), taurine (an amino acid), niacin, pyridoxine, cyanocobalamin (B12), riboflavin (B2), ginseng extract, glucuronolactone (a glucose metabolite), inositol (B8), guarana (contains caffeine, theobromine, and theophylline), ephedra, Yohimbine, ginkgo, kola nut, theophylline, vitamins, herbs, and/or L-carnitine."

These chemical additives are not well studied and so much of their effects can't be determined. Due to many being natural and the protection of trade secrets, the manufacturers of these energy drinks can get around federal guidelines in regard to regulations on caffeine limitations. However, the danger of these drinks cannot be dismissed. In 2014, the federal government warned that more than 10% of emergency room visits by people over the age of 12 for problems related to energy drinks were serious enough to result in hospitalization.

### Caffeine Withdrawals

One of the biggest signs of any kind of chemical dependency is the presence of withdrawal symptoms when eliminating it. Typically, caffeine withdrawals will begin within 12-24 hours after discontinuing consumption. The most common signs and symptoms include the following: headache, fatigue, anxiety, difficulty concentrating, depression, irritability and even tremors.

As with any other withdrawal symptom there are ways to avoid it. The easiest would be to just cut back slowly; if drinking 4 cups of coffee or cans of soda then cut back to 3 and so on. Many withdrawal symptoms can worsen due to dehydration, therefore, every caffeinated beverage eliminated should be replaced with 8 ounces of natural spring water.

### In Summary

Despite the U.S. Food and Drug Administration's many attempts to regulate caffeine in beverages, the companies' claims that it is a "flavor enhancer" or that the products are a dietary supplement have frustrated all efforts. With this in mind, it is important to consider most product labeling with a degree of skepticism.

Of course, when it comes to soft drinks, sports drinks, energy drinks and even coffee-based beverages, caffeine is just the tip of the iceberg. While it is definitely of primary concern, the sugar content must also be considered. Any beverage that has added carbohydrates, especially when it is in the form of high-fructose corn syrup, is a source of empty calories and should be avoided. Yes, this includes that delicious looking Frappuccino from Starbucks with the whipped topping – some are over 500 calories each.

Just as important as your regular adjustments, what you put in your body will have an equal effect on your overall health. Your Family Wellness Chiropractor would encourage you to remember this.



Dear Patient,

*Dr. Brayton is dedicated to providing you with the absolute best in family wellness care. So take a moment today to discuss with your Family Wellness Chiropractor any concerns you may have regarding your family's overall health and wellness.*

**This newsletter is provided to you by:**

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