

Energy Efficient

The highs and lows of energy drinks—are they really worth the buzz?

By Karon Warren

The ads are everywhere: “Red Bull gives you wings!” “Avoid the sugar crash with 5-Hour Energy!” Not to mention those for Monster Energy, Rockstar Energy, AMP Energy—the list goes on and on. But what’s really in these drinks? Are they healthy for you? What are the risks? How do you decide if you should use one and, if so, which one? To find out, *TR* sought out some of Atlanta’s health and nutrition experts to get the answers.

Beyond the Label

Read the labels on energy drinks and you’ll find a lot of similar ingredients: caffeine, B vitamins, amino acids, ginseng, artificial sweeteners and glucose, among others. While many of us are familiar with some, if not all, of these ingredients, how many of us really know what purpose they serve? Yes, caffeine gives us an energy jolt, but what about the others?

B vitamins, such as vitamins B6 and B12, niacin (B3), and riboflavin (B2), aid in the buildup and breakdown of carbohydrates, fat and protein. In addition, they are water-soluble, which means they will be flushed out once the body reaches its maximum daily intake.

Amino acids, like taurine, tyrosine and phenylalanine, serve a variety of functions. For instance, taurine helps promote detoxification, while tyrosine transmits nerve impulses to the brain and increases mental alertness. Phenylalanine also works to improve alertness.

Ginseng is an Asian herb that boosts mental performance while supporting overall health. Glucose and sucrose are common sugars that provide energy along with carbohydrates such as glucuronolactone. High fructose corn syrup is another frequent component in energy drinks.

Other ingredients may include guarana or yerba mate, which also contain caffeine. "It's all caffeine under different names," says Shealynn Buck, M.D., national medical director for Blue MedSpa International and a certified Wellcoaches health and wellness coach. "That's the 'energy' of 'energy drinks.' They can have the equivalent of five to six cups of coffee."

Before You Drink

On the surface, it appears that energy drinks are a safe and healthy option for consumers. After all, they are packed with common ingredients that are found in many foods or occur naturally in the body. However, in this case, it's the sum of the parts that may cause concern. "A lot of possible side effects are due to the combination of ingredients, not just one or two ingredients," says Ilana Katz, M.S., R.D., C.S.S.D., of Optimal Nutrition for Life in Atlanta, where she works with NFL and NHL players as well as triathletes.

Possible side effects range from jitters and increased nervousness to sleeplessness and occasional rapid heartbeat. Some consumers may experience a niacin flush, which is a hot feeling accompanied by skin redness and possible itchiness. Usually, this will pass in a few minutes. In addition, anyone with the genetic disorder phenylketonuria should avoid energy drinks because they contain phenylalanine, which can harm the central nervous system and cause brain damage.

Due to their contents, energy drinks also may have adverse interactions with medications. For instance, Buck says caffeine increases blood pressure and heart rate, which could negatively impact high blood pressure medicines. Plus, some high blood pressure

medicines may contain niacin, which could increase the niacin flush. Many headache medicines also contain caffeine, so drinking an energy drink after taking these medicines will exacerbate the body's caffeine levels. "As you increase the dose of caffeine, you increase your risk of side effects," Buck says.

Furthermore, energy drinks contain large amounts of sugar, which serve to increase energy. "Most contain more sugar than your daily allowance," Buck says. "They can have 300 to 400 calories per drink. Alcoholic energy drinks may have 600 calories."

Compounding this fact, the average energy drink container features more than one serving. "We're seeing the size of energy drinks getting larger," Buck says. "Pay attention to serving size. The typical serving size is 8 ounces." Today's energy drinks are available in 16 ounces and even 24 ounces, which is the equivalent of two and three servings, respectively.

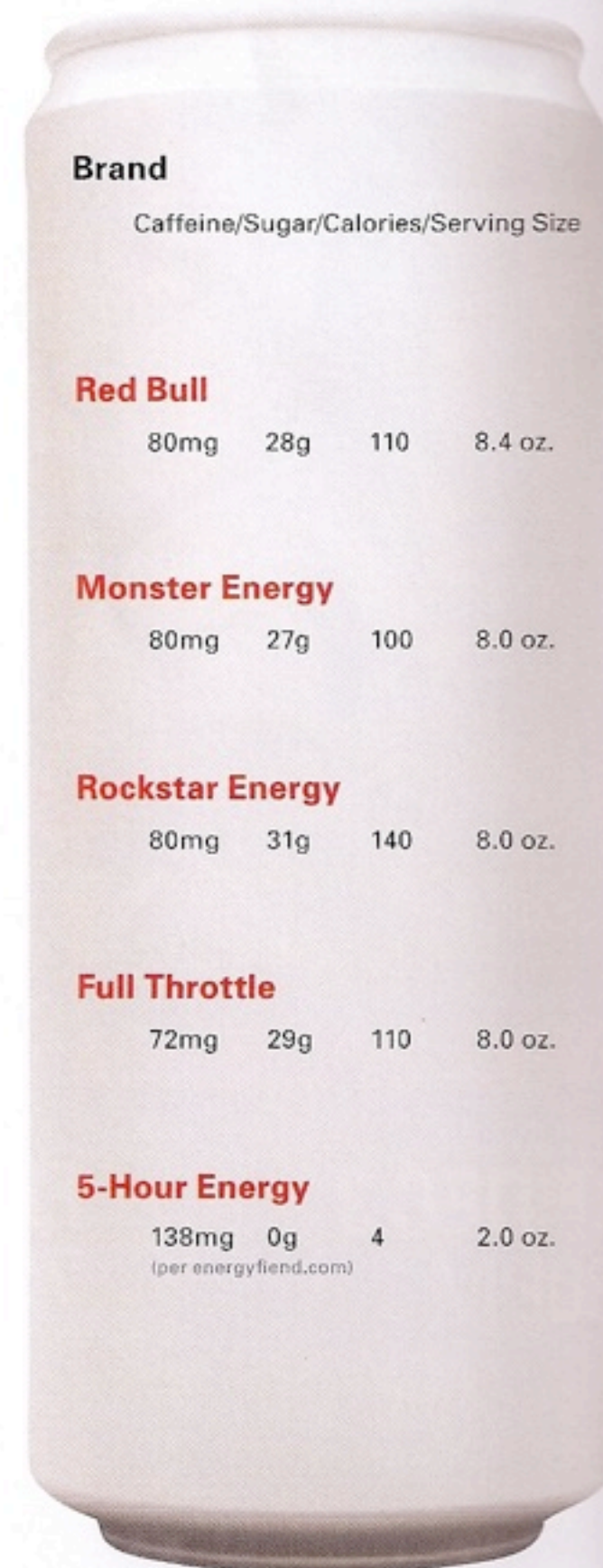
Proceed With Caution

Despite the possible risks, there can be some positives to energy drinks. "They can be a benefit in the short term," Buck says. "If you're driving a long distance, they can improve alertness. It also can improve alertness with certain mental activities. However, these results usually show up in those not tolerant to caffeine." In fact, increased use may leave the body resistant to caffeine, requiring more energy drinks to provide the same outcome.

For best results, Katz says to follow all the instructions for proper use. "Don't use more than one a day, preferably not more than one every few days," she says. "Use a trial-and-error approach to see [which drink] works best for you."

Katz recommends that everyone do their research and know the active ingredients of any energy drink they are considering for use. "Read up on possible side effects and possible interactions with medications," she says. "Individuals need to look at [and assess] their own individual health situation." ❧

How the Top Brands Compare



Brand	Caffeine/Sugar/Calories/Serving Size			
Red Bull	80mg	28g	110	8.4 oz.
Monster Energy	80mg	27g	100	8.0 oz.
Rockstar Energy	80mg	31g	140	8.0 oz.
Full Throttle	72mg	29g	110	8.0 oz.
5-Hour Energy	138mg	0g	4	2.0 oz.
	<small>(per energyfiend.com)</small>			