

What's brewing in those energy drink bottles? The answer just might be an eye-opener.



# Alternative Fuels

We've debunked taurine and guarana for years. But energy drink makers have found new ways to entice you. Don't be fooled

BY LAURA ROBERSON • PHOTOGRAPH BY TRAVIS RATHBONE



**AMERICA IS IN THE MIDST OF AN** energy crisis. We're guzzling energy drinks and shots at record rates but feeling more lethargic than ever. Sales of these products have more than doubled in the past 5 years, with 35 percent of men ages 18 to 24 drinking them regularly, a new Mintel survey reveals.

"Guys create an up-and-down trap with energy drinks and with whatever they take at night to help slow down," says Matthew Edlund, M.D., author of *The Power of Rest*. "They never feel completely rested." Or, even scarier, they end up on a gurney in the ER. Hospital visits related to energy drinks have surged more than tenfold since 2005, reports the U.S. Center for Behavioral Health Statistics and Quality. And most of those amped-up patients are men.

"Energy drinks emphasize vigor, power, all the things that appeal to men," says Cecile Marczynski, Ph.D., an assistant professor of psychology at Northern Kentucky University. Guys willingly swallow the bottled boosters' claims, when they should really be asking, "Why am I so damn tired?"

"We don't use our bodies the way they're built to be used," says Dr. Edlund. "We guzzle energy drinks and then can't sleep at night. We sit all day and then read e-mails at 3 a.m." It's no wonder we walk around like zombies—and treat these drinks like liquid life support. As sales and heart rates spike, it's a good time to question the trends and find healthier ways to power up.

Styling: Wendy Schelen/Haley Resources

**ENERGY SPIKE 1**

**Decaf energy drinks**

Marketers of energy drinks are clever—they remove a well-known, often worrisome compound and then tout the resulting drink as a "healthier" version of the original. The first vilified ingredient was sugar. Now it's caffeine. Hydrive and 5-Hour Energy have both unveiled decaf options. Makes sense: Some 38 percent of men who buy energy drinks now look for low caffeine content, the Mintel survey found.

So what's the alleged alternate energy source? Most often, B vitamins. A decaf 5-Hour Energy shot, for example, packs several thousand times your daily recommended B<sub>12</sub> and B<sub>6</sub>, plus 100 percent of your folic acid. But here's the thing: You won't feel a B-induced boost, since the energy provided by B vitamins isn't stimulating like caffeine. "They simply help extract energy from your food, and you need only a little bit," says Tod Cooperman, M.D., president of ConsumerLab.com, an independent tester of health and nutritional products. "The science is misused to lead people to believe that a megadose of B vitamins will somehow energize them. It won't."

Plus, if you eat fortified foods or take a multivitamin, energy shots could send you over the folic-acid edge—which in the long term, he warns, could raise your cancer risk.

**YOUR MOVE** For a caffeine-free boost, sip on FRS Healthy Energy drinks. They're free of folic acid and contain reasonable levels of the other B vitamins. What makes FRS effective is quercetin, an antioxidant that can help you fight fatigue during exercise, a 2010 University of South Carolina study found. Like caffeine, quercetin also blocks brain receptors for adenosine—a chemical that makes you sleepy—to make you feel energized, says study author Mark Davis, Ph.D. "Over time, it can also increase the number of mitochondria in your cells," he says, "which provide energy for your muscles."

**ENERGY SPIKE 2**

**Coffee energy drinks**

Herbal ingredients may trigger a guy's skepticism, but coffee appeals to the average Joe. "Coffee is a commonly consumed, relatively

safe product," says Marczynski. "So people may assume coffee energy drinks are safe, too." But even if the label says "coffee," you may still be downing an alphabet soup of ingredients. Java Monster, for example, which claims to contain "premium coffee and cream," is actually a blend of coffee extract, milk, taurine, panax ginseng, caffeine, and guarana.

"Panax ginseng has been linked to pretty significant side effects, including abdominal pain

## The promise of instant crash-free energy is exactly what makes shots dangerous.

and headaches," says University of Massachusetts toxicologist Richard Church, M.D. And guarana is just an herbal guise for an extra shot of caffeine—its seeds pack about four times the caffeine of coffee beans.

**YOUR MOVE** Fire up the coffeepot instead. "In addition to the caffeine boost, coffee can lower your risk of depression, diabetes, and Parkinson's disease," says Dr. Edlund. "Plus, it has a healthy social element. You're often with others when you drink coffee." If you're brewing at home, opt for light-roast blends, such as the new Starbucks Blonde Roast; these offer significantly more antioxidants than dark roasts, a 2011 Portuguese study found.

**ENERGY SPIKE 3**

**Energy shots**

Red Bull recently introduced giant cans, but the bigger trend is toward shrinking drinks. According to a Mintel estimate, Americans dropped about \$1.3 billion on energy shots in 2011—more than 17 times the \$73 million they spent in 2006. What's the lure? The promise of crash-free energy in just a couple of sips—in other words, the very effect that makes these drinks dangerous. "Shots contain all the stimulants of large energy drinks," says Marczynski. "But because they're only a couple of sips, people often drink more than one. They're using energy shots to stay up all night."

**YOUR MOVE** There's a better way to fuel up before a night out. "Drink a lukewarm cup of

coffee really quickly, and then close your eyes for 15 to 20 minutes," says Michael Breus, Ph.D., a sleep specialist in Virginia Beach. "You'll get enough rest to decrease your sleep drive. Then after you start moving again, the caffeine will kick in to keep you awake." Before you head out, grab a protein-rich snack, too, like a handful of almonds. "Protein helps increase insulin production, and insulin can have an alerting effect," he says.

**ENERGY SPIKE 4**

**Juice and tea drinks**

About half of energy drink consumers are interested in juice- or tea-based alternatives, according to Mintel. That's a bright spot: Juices contain many of the same vitamins added to energy drinks, but in their natural form. "Food is not one substance or vitamin," Dr. Edlund says. Whole foods provide a matrix of nutrients, some of which may enhance others' effects in your body, he says. So isolating a single nutrient could rob you of the whole food's full benefits. And while Red Bull may amp you up more effectively than tea, the liquid in that silver can lacks tea's disease-fighting antioxidants.

**YOUR MOVE** Check the label: Juice and tea should replace, rather than accompany, energy drink ingredients such as guarana and B vitamins. We like the new V8 Berry Blast Energy Shot—each 50-calorie serving offers a blend of 10 juices and green tea extract, and it's refreshingly devoid of unpronounceable additives. Or just grab a bottle of tea. According to a 2008 study in *Psychopharmacology*, the combination of caffeine and theanine, an amino acid in tea, may boost alertness without raising blood pressure as much as caffeine does alone. Try Honest Tea Community Green Tea; it's lower in sugar than most bottled brews.

**ENERGY SPIKE 5**

**Nonliquid energy**

Energy boosts no longer require a bottle. Rockstar and Amp now come in gum form, with 40 milligrams of caffeine in a single piece; products like LiveWire and High Octane energy chews claim to pack as much caffeine as a cup of coffee. The danger: "People think a stick of gum is a stick of gum. Before they know it, they've crammed five pieces into their mouths," says Dr. Church. That's like drinking a pot of coffee—but with a side of artificial sweeteners or, in the case of the chews, corn syrup and evaporated cane juice.

**YOUR MOVE** Close your eyes and focus on a specific place of tension on your head or neck, Dr. Edlund says. "Removing one spot of tension can help your entire body relax. Focus and energy are closely related." ■



## RELAXATION IN A BOTTLE?

*Don't rely on these drinks to wind down—the science is too foggy*

If energy drinks are the bad boys of the cold case, relaxation drinks are the stoners. Currently, an estimated 400 "anti-energy" drinks are sold in the United States, and they share one common promise: "Drink this, and you'll chill." So what's their alleged soothing secret? A blend of ingredients like melatonin, valerian, GABA, and 5-HTP, all of which are purported to induce sleep, relieve anxiety, or both. The effect may be very different from what is advertised—only the individual ingredients, not the combinations, may have been studied. Or there may be no effect at all: "Many of these ingredients degrade in water," says Joe Vinson, Ph.D., a professor of chemistry at the University of Scranton. Your alternative: a noncaffeinated herbal tea. In a 2012 Australian study, drinking caffeine-free beverages was linked to increased relaxation and work-stress recovery. —L.R.