



# Spiked!

From energy drinks to sugary coffee concoctions, kids are consuming more caffeine than ever. **How dangerous is it?**

BY KATHARINE MIESZKOWSKI

VENOM, SOBE ADRENALINE RUSH, Monster, PimpJuice, Vamp, Huracan, Rip It Lime Wrecker Energy Fuel, Radioactive Energy, Whoop Ass, Killer Buzz. That's a mouthful. But it's just a taste of the hundreds of so-called energy drinks now tempting kids with the lure of an instant, 100 percent legal over-the-counter jolt.

"They get you really hyped up," gushes Marnee Maxine Causey, 14, an eighth-grader at Martin Luther King Middle

## **2 BILLION**

That's how many cans of Monster (left) and other energy drinks Americans downed in 2006.

School in Berkeley, California. She guzzles her favorites, like Rockstar and Hyphy Juice, three or four times a week, and is especially tempted on game days to get "pumped" before playing basketball.

Call it buzz in a bottle—the new high-dose sugary caffeine drinks that supercharge the MySpace crowd. They're already a \$4.9 billion industry, according to *Beverage Digest*, with over 100 new drinks hitting the market in 2006. Many pack double or even triple the amount of caffeine of traditional soda. Ditto for the gourmet coffee concoctions, so loaded with sugar and calories, they're basically a candy bar in a cup.

While kids as young as middle-schoolers get their buzz on, they're also getting hooked. And all this caffeine can have serious consequences for growing bodies.

Angela Sharkey, MD, a pediatric cardiologist, sees the kiddie caffeine trend at her local coffee shop in St. Louis, where teenagers line up before school for Mocha Frappuccinos and Caramel Macchiatos. Over the past five years, Dr. Sharkey has treated more and more young people suffering from dizziness and fainting. "The kids end up dehydrated because they haven't been drinking anything but caffeinated beverages all day," she says. She sends them back to school with a bottle of water and a doctor's note saying that they

should be allowed to drink it during their classes.

OD'ing on caffeine can have scarier aftereffects. At very high doses, the stimulant can cause a racing heart rate, heart palpitations, even seizures.

Stephen Martinelli's favorite energy drink was Amp, with 75 milligrams of caffeine per 8.4-ounce serving (roughly twice the amount in a can of soda). But when the 16-year-old from Gwinnett County, Georgia, heard about Cocaine Energy Drink, which packed a whopping 280 milligrams, he decided to give it a shot: "Friends told me about it and said it was really

strong," says the high school sophomore. The illicit name didn't hurt either. "Cocaine was popular," he explains. "Everyone wanted to try it, because it sounded like taking drugs."

"Everybody is looking for that extra pick-me-up, from students who drink them to stay awake studying, to teenagers who want to stay up all night playing video games," says Dan Mayer, 25, who has taste-tested dozens of brands for his blog, *Energy Drink Reviews*.

Consuming three-quarters of a can of Cocaine landed Martinelli in the

emergency room on an IV drip, dizzy and vomiting. At first the ER docs thought the teenager must be overdosing on drugs, Martinelli says. But after blood and urine tests, they found he was suffering serious dehydration from caffeine poisoning.

Recently Cocaine was outlawed after its manufacturer ran afoul of the FDA for marketing the drink as "liquid cocaine" and "the legal alternative" to the street drug. In response, the company renamed it Censored and put the drink back on the shelves, promoted with the slogan "Banned by the Man."

Beverage makers demur that they don't market their highly caffeinated rocket fuel to kids. Yet they're everywhere teens want to be, sponsoring events from skateboarding to fashion shows and concerts.

The drinks inspire such fandom that some guys in their own MySpace photos pose next to towering stacks of their favorite beverage, showing the whole world how many cans they'll dare to down. On YouTube, kids have even posted videos of themselves "shotgunning" energy drinks. That's puncturing the bottom of

the can to chug it in one gulp. Teenage boys, natural extremists who just can't get enough of that jolt-in-a-can, compete to see how many they can slam and how quickly.

**We  
now spend  
as much on  
energy drinks  
as we do on  
video games,  
almost  
\$5 billion  
last year.**



So it's no surprise that emergency room physicians and toxicologists around the country are noticing an increase in caffeine-related symptoms among young people. Last year, Guy Shochat, MD, of the University of California, San Francisco, treated an 18-year-old who showed up in an ambulance with a heart rate of 220 (60 to 100 is normal). The patient, a recent high school grad, had been drinking eight 16-ounce cans of Rockstar every day to stay up for his night-shift job.

If you can't drink it, you can still swallow it—in a pill. A study of data from the Illinois Poison Center found more than 250 cases that required medical attention from the overuse of caffeine pills like Vivarin and NoDoz. Average age of the overcaffeinated patients: 21. The most extreme overdoses are fatal. Last November a 19-year-old man had a heart attack and died after taking nearly two dozen NoDoz tablets.

CAFFEINE POISONING isn't the only condition that concerns pediatricians. With childhood obesity a national epidemic, doctors are dismayed to see newfangled ways for kids to drink empty calories. A single Java Chip Frappuccino with whipped cream packs 510 calories and 59 grams of sugar into 16 ounces.

While kids overdo the calories, many come up short on sleep. Nearly half of kids 11 to 17 years old don't get the minimum eight hours a night, according to the National Sleep

Foundation. Many use caffeine to keep going, and the loss of sleep takes its toll. One 2003 study by neurologists at Ohio State University found that seventh-, eighth- and ninth-graders who drink a lot of caffeine are up later at night and are more tired during the day than their peers. Nearly 30 percent of all teens actually fall asleep in class at least once a week.

Even overdoing it during crunch times like exam week can backfire. While one cup of coffee may make you feel focused temporarily, downing several energy drinks or a whole pot of coffee can have the opposite effect. "Your ability to concentrate is actually diminished," explains Tareq Bey, PhD, a professor of emergency medicine at the University of California, Irvine. "You're so hypervigilant, you can hardly process the data that comes at you."

While many adults can drink as much as 300 milligrams of caffeine a day—that's several cups of strong-brewed coffee—without suffering any unpleasant side effects, the stimulant can be harder on kids. Plus, most energy drinks contain ingredients that accelerate caffeine's effects (watch labels for taurine and guarana).

Signs that a child or teen has overdone it: nervousness, anxiety, insomnia, shaking, nausea or diarrhea. An overcaffeinated kid may exhibit symptoms associated with (and sometimes mistaken for) ADHD.

So what is a reasonable amount of caffeine for a child or teen? Many pe-

diatricians will tell you simply that any caffeine is too much. "Children shouldn't have it at all," says Margaret R. Savoca, PhD, a pediatric nutritionist who has found that consuming more than 100 milligrams of caffeine per day is linked to high blood pressure in adolescents, especially in African Americans. With kids' blood pressure on the rise, the last thing they need is an artificial energy boost. Besides, if kids are eat-

ing well and getting enough sleep, they should naturally have more than enough energy.

How can you tell if your child or teen has developed a caffeine habit? See what happens when that energy drink or coffee isn't available for 24 hours. If he appears excessively sleepy or lethargic, or gets a headache, it's time to cut back. The good news: This is one habit anyone can quit cold turkey.

#### A WORD (OR TWO OR THREE) TO THE WISE

*What with millions of words to choose from, you wouldn't think the English language needs any more. You'd be wrong. Here are a few new ones that dictionaries should start making room for.*

**Abdicake:** To give up the last piece of cake to someone else.

**Accidue:** Small pieces of broken glass, metal and other debris that remain at the scene of an accident.

**Calorosity:** The desire while dieting and eating out to look over the dessert menu and still possess the willpower to not order any dessert.

**Flabbygast:** To be overcome with astonishment that despite excessive dieting, you haven't lost a pound.

**Manorexix:** Characterizing a male who eats an extremely large amount of food yet gains no weight.

**Nostralgia:** A reminder of one's past brought on by a familiar or more recently unfamiliar smell.

**Plaquack:** The one mysterious dentist out of five who doesn't provide advice such as recommending sugarless gum for his patients who chew gum.

