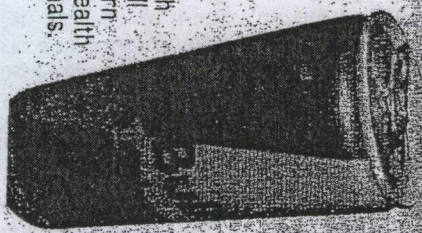


Experts: Energy drinks not all they're hopped up to be

C/S



Teens use of energy drinks such as Red Bull is a concern to some health professionals.

BY JANE ZIMMERMAN
THE PRESS-ENTERPRISE

They promise to "give you wings" and "unleash the beast," but health experts warn that energy drinks and their prime target—teenagers—don't mix. At the very least, the caffeine-laden beverages can cause dependence and sleep disturbances for a group already deemed short on slumber, critics say. At higher levels, car-

otinine can lead to anxiety, nervousness, shaking, irritability, mood disorders and behavior problems. Caffeine raises the heart rate and blood pressure and can aggravate underlying problems such as hypertension, heart disease and anxiety disorders, doctors warn. The carbonated energy drinks, which contain natural stimulants and herbs that

promise to improve performance and increase concentration and reaction speed, have joined sodas and trendy coffee drinks as the latest villains in the battle over childhood health and obesity. Opponents fear that parents might be oblivious to the stimulant potential of the drinks and their high sugar content, and lured into a false sense of health by the addition of herbs, vita-

mins and amino acids. "It just because it's called energy doesn't mean it's a health product," said Kith Freier, a Loma Linda University pediatric psychologist. With the introduction of about 100 brands a year in the United States, "functional beverages" are everywhere, from high school campuses to corner convenience stores. While ener-

SEE DRINKS/BACK PAGE

Writing Prompt: Should teenagers or young children drink energy drinks?

DRINKS: Caffeine, other ingredients a concern

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gy drinks are a small category in non-alcoholic beverage sales, less than 6 percent, they are the fastest-growing category, up 80 percent between 2004 and 2005, Beverage Digest editor John Sicher said.

With hip labels and their free distribution at wrestling matches and Supercross events, energy drinks entice a young crowd. Many teens swear by the drinks.

"If I have one when I get home from school, I'm more focused on my work," said Tiffany LeRoux, 15, of Menifee, in southwest Riverside County. She downs as many as four a day, equal to about three cups of coffee, and sometimes skips breakfast and lunch.

Jeff Diehl, owner of Highland-based Nitro2Go, said the outlaw reputation fuels sales, but the criticism is unwarranted.

"The same parent that will give grief over a kid drinking an energy drink will buy their kid a 44-ounce Big Gulp, which has more caffeine and sugar," he said.

Diehl and other manufacturers say their products are safe when used in moderation. Still, warning labels on cans of Nitro2Go say it is not appropriate for people who are pregnant, nursing or sensitive to caffeine, and the product should be limited to no more than three a day. Many other energy drinks do not include such cautions on their labels.

Once for ounce, energy drinks have about four times the amount of caffeine found in regular sodas. SoBe No Fear has 158 milligrams of caffeine per eight ounces, nearly 20 times the caffeine per ounce as soda.

Some schools, including Rubidoux High School in Riverside and Jurupa Valley High School in Mira Loma, have stopped selling the popular drinks to comply with state law that bans campus sales of junk food, including sodas and energy drinks, beginning next summer. But not Great Oak High School in Temecula, which continues selling Monster and Rockstar at the student store.

"I know they're really popular with the kids, but I can't imagine that they're great for you," said activities director Don Skaggs.

Middle school students crowd

CONTENTS

Hundreds of energy drinks fuel a \$3.5 billion industry in the United States. Here's what's in them:

CAFFEINE: Considered a drug, it is found in coffee, tea, cocoa and chocolate. In moderate doses, it can increase alertness. Addiction can produce withdrawal symptoms.

TAURINE: This is an amino acid naturally produced by the body and is also found in meat, fish and eggs. It is thought to help regulate heartbeat and maintain cell membranes. Drink makers say it helps the body recover from physical and mental stress.

CARNITINE: This is an amino acid and stimulant produced by the liver and kidneys, that helps turn fat into energy. The body produces all it needs, but supplemental carnitine might improve the ability of certain tissues to produce energy.

GINSENG: This is a Chinese herb that can be used as a stimulant; it helps the body adapt to stress.

GUARANA: This is a South American herb and stimulant that can be used to regain strength; its effects are similar to caffeine.

B-VITAMINS: These combat stress and boost energy. They are found in beef, milk and fortified cereals.

SOURCE: EBSCO PUBLISHING; WWW.BOTANICAL.COM; NEUROSCIENCE FOR KIDS

Gerrard's Market in Redlands before and after school to "load up with energy drinks and candy bars," owner Gene Thorpe said.

Duke University toxicologist Wilkie Wilson said long-term affects of caffeine on kids are unknown.

"The human brain is developing until the early 20s, at a very minimum. If you chronically alter its chemistry by the regular use of caffeine, then what will the developmental consequences be for that brain? That is an important and unanswered question."

Freier, of Loma Linda, worries even younger children are drinking more caffeine. Last year, Advocare introduced Kick Start Spark, a nutritional energy drink for children as young as 4, with vitamins, minerals and 60 milligrams of caffeine per serving, almost as much as

CAFFEINE LEVELS

| Product | Amount |
|----------------|----------------------|
| Full Throttle | 72 mg./8 oz. |
| Amp | 75 mg./8.4 oz. |
| Nitro2Go | 80 mg./8.4 oz. |
| Red Bull | 80 mg./8.2 oz. |
| SoBe No Fear | 158 mg./16 oz. |
| Coffee, brewed | 107 mg./8 oz. |
| Starbucks | 200 mg. (avg.)/8 oz. |
| Mountain Dew | 55 mg./12 oz. |
| Diet Coke | 45 mg./12 oz. |
| Jolt Cola | 100 mg./12 oz. |
| No Doz | 100 mg./tablet |
| Vivarin | 200 mg./tablet |
| Excedrin | 65 mg./tablet |

SOURCE: NATIONAL SOFT-DRINK ASSN.; JOURNAL OF ANALYTICAL TOXICOLOGY; NEUROSCIENCE FOR KIDS

that found in two cans of Coke.

Doree Morgan, a registered dietitian at Kaiser Permanente in Fontana, said energy drinks are OK occasionally as long as they are balanced with good nutrition and adequate sleep. Because the caffeine in them is dehydrating, they should not be used during intense exercise, and should not be consumed every day, she said.

Morgan also raises issue with the sugar and empty calories in energy drinks and their effect on children's weight. Some of the drinks are sugar free, but those that aren't contain about 8 teaspoons of sugar in 8 ounces, slightly more than sodas, and 125 calories.

Other prime ingredients — B-vitamins and the amino acids taurine and carnitine — are either produced by the body or found in a healthy diet, she said.

The FDA has not addressed what the terms "energy" or "energizer" mean, nor what characteristics a product must possess to use those terms, a spokesman said.

Colleen Beck, 17, can't buy the drinks anymore at Rubidoux High School, but she has no plans to give them up. "With all the ginseng and taurine in the energy drinks, you have, like, half a can and ... you're good to go for hours."