

# diversions



## Caffeine poses threats to users

BY ERIN GIBSON  
Editor

It's the drug of our lifetime. Cheap. Plentiful. Legal. Invisible. It evokes a sort of blind faith among thousands of college students, professionals and retired folks who depend on it for energy.

It magnifies their mugs of morning eye-opener. It packs a punch in their 20-ounce quick slams.

It lurks in chocolate and coffee-flavored treats, including many innocent-looking ice creams and yogurts.

It's even loaded into some new fruit juices and waters in amounts high enough to jolt an unwary consumer.

The drug is caffeine, and it powers an explosive new java-loaded marketplace — one whose health risks could consume Generation X while the generation consumes it.

New retail shops, magazines, clubs and Web sites tout caffeine's abilities to keep a generation alert and trendy.

But somewhere, mingling among stepped-up colas and trendy java-jolted espresso drinks, lies the naked truth about capitalism's coolest beans:

As with any other sinful substance, caffeine affects health, and nutritionists say consumers should watch how much they take in.

Caffeine overdose symptoms, including nervousness, insomnia and irregular heartbeats, can begin after ingesting as little as 250 mg of caffeine, according to the American Psychiatric Association.

A lethal dose is about 10 grams or more, the association reports, but that limit varies with an individual's average, typical caffeine consumption, body weight and other health conditions.

Moderate caffeine consumption appears safe, said John Scheer, a University of Nebraska-Lincoln associate professor in health and human performance.

But moderate consumption means drinking no more than two small cups of

coffee a day, Scheer said. Small means about 5 ounces, he added.

The National Coffee Association reports an 8-ounce cup of brewed coffee contains about 135 milligrams of caffeine. Two small cups would contain about 169 mg.

A 20-ounce bottle of Mountain Dew, the most popular pop brand among UNL students, contains about 69 mg, according to the National Soft Drink Association.

Within five minutes of consumption, caffeine stimulates brain activity and acts on nerve endings to increase endurance and wakefulness.

Scheer said caffeine also increases a consumer's respiration rate, heart rate, blood pressure and the amount of stress hormones in the bloodstream.

In a hot environment, caffeine's diuretic effect — how it forces the body to expel water — is potentially hazardous, Scheer said.

Caffeine also hinders iron consumption and can sap bones of calcium, according to several nutrition reference books.

"If you're a heavy coffee drinker, you're taking a risk for a variety of side effects," Scheer said.

Yet Americans consume about 150 billion cups of coffee a year and about 60 million cups of pop a day. Half of all Americans drink coffee daily. Many students seem to contribute heavily to such figures by consuming caffeinated drinks by the bucketful.

For student java junkies who want to quit their habit of downing 16-ounce cups of joe while studying and socializing late nights, Scheer recommends they wean themselves off the addictive drug carefully.

Before an important exam or project, "college students who are used to caffeine should not skip it," he said.

Withdrawal symptoms include headaches, drowsiness and fatigue, he said, and could affect students' performance.

For students who aren't caffeine addicts — and even for those who are — Scheer suggests an alternative to stepping up caffeine use during the end-of-the-semester crunch.

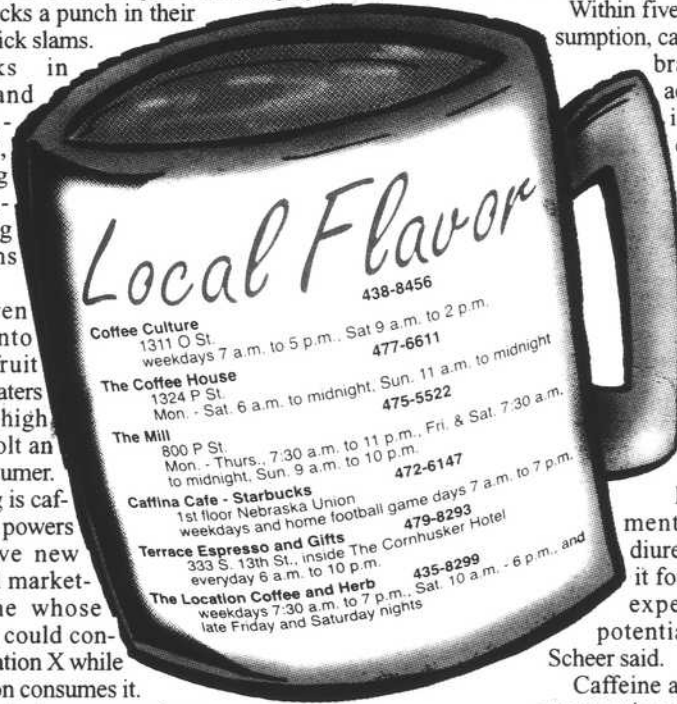
"A very natural way to keep the body awake is a fast 10-minute walk."

### Caffeine Content

Product	Serving Size	Caffeine <sup>o</sup>
<b>OTC Drugs</b>		
Vivarin	1 tablet	200
No Doz, regular strength	1 tablet	100
<b>Coffees</b>		
Espresso	1.5 ounces	100
Coffee, brewed	8 ounces	135*
Coffee, instant	8 ounces	95
Coffee, flavored instant	8 ounces	25-90
Coffee, decaffeinated	8 ounces	5
<b>Teas</b>		
Tea, leaf or bag	8 ounces	50*
Iced Tea, bottled	16 ounces	18-40
Tea, green	8 ounces	30
Tea, instant	8 ounces	15
Tea, herbal	8 ounces	0
<b>Frozen desserts</b>		
Ben & Jerry's No Fat Coffee Fudge Frozen Yogurt	1 cup	85
Starbucks Ice Cream	1 cup	40-60
Haagen-Dazs Coffee Ice Cream	1 cup	58
Healthy Choice Cappuccino	1 cup	8
Chocolate Chunk	1 cup	8
<b>Soft Drinks</b>		
Jolt	16 ounces	100
Mountain Dew	16 ounces	55
Surge	16 ounces	51
Diet Coke	16 ounces	47
Coca-Cola	16 ounces	45
Dr. Pepper, regular & diet	16 ounces	41
Sunkist Orange Soda	16 ounces	40
Pepsi-Cola	16 ounces	37
Barqs Root Beer	16 ounces	23
7-Up, Sprite	16 ounces	0
Mug Root Beer	16 ounces	0
Minute Maid Orange Soda	16 ounces	0
<b>Caffeinated waters</b>		
Java Water	1/2 liter	125
Aqua Java	1/2 liter	50-60
<b>Juices</b>		
Juiced	10 ounces	60
<b>Yogurt's, one container</b>		
Dannon Coffee Yogurt	8 ounces	45
Yoplait Cafe Au Lait Yogurt	6 ounces	5
Dannon Light Cuppoccino Yogurt	8 ounces	1
<b>Chocolate</b>		
Hershey's Special Dark Chocolate Bar	1 bar (1.5 ounces)	31
Hershey Bar, milk chocolate	1 bar (1.5 ounces)	10
Cocoa or hot chocolate	8 ounces	5

<sup>o</sup> in mg \*varies with strength

JON FRANK/DN



### A cupful of coffee basics

#### What's in a Roast?

The term "roast" refers to how coffee beans are roasted to obtain a particular depth of flavor after they are picked, washed and dried. The more a bean is roasted, the darker it becomes and the more it trades its coffee traits for a pungent roast aroma and more roasted flavor. Unfortunately, roast definitions vary with each roaster. To get the "right" roast, inspect the beans before buying.

#### From seed to shelf

Popular arabica coffee beans grow on large 14- to 20-foot tall bushes and mature inside bright red, cherry-like berries that hang among green, oval-shaped leaves on bush branches. Each cherry contains two flat seeds, which are coffee beans. After berries are picked, light green coffee beans are extracted from the fruit. Beans are washed and dried, then roasted to obtain their light to dark brown color and rich flavor.

MATT HANEY/DN

sources: *Over the Coffee*, *COFFEE NUTZ*, *The Coffee Science Source*