# you are what you drink

Sugary drinks are not only full of calories—new research shows they also pose a scary health danger.

#### Are you at risk?

by Cara Birnbaum

Ginger Fewell, 31, likes her sugar strong, cold, and on the fizzy side. "I have my first Coke at 10 a.m. after getting to work," says the St. Louis genome scientist. For lunch, Fewell dashes to Subway for a sandwich and a fountain soda (a 32-ouncer if it's been a tough day), then downs another can a few hours later while cooking dinner. "I might switch to water once I sit down to eat, but sometimes I'll just have another Coke," she admits. "I've tried to drink diet soda, but I just can't. I crave the sugar."

Fewell isn't the only one jonesing. We're a nation of sugar drinkers. Consumption of soda alone has jumped a whopping 135 percent in the past 30 years. And a new study shows that soda and fruit punch may do much more damage than just making your jeans tight. When researchers at the Harvard School of Public Health tracked the soft drink consumption of 91,000 women over eight years, they found that those who guzzled one or more sodas or fruit punch drinks daily nearly doubled their risk of developing Type 2 diabetes, a life-threatening disease that causes chronically high blood sugar and can lead to heart and kidney damage. Find out here what kind of toll your drinking habit is taking on your health—and how you can tame your sweet tooth.

did Guzzling one or more sugary sodas a day could nearly double your risk of diabetes.

Whoa! Americans are downing 135% more soda today than they were 30 years ago. Turn to page 126 to count the calories.>>>

### how much sugar are you drinking?

#### Vitamin Water has

8 teaspoons of sugar (150 calories)



#### what a sugar rush does to your body

Within minutes of passing your lips, a cola's hefty load of sugar is coursing through your veins. Because the beverage consists almost entirely of sugar, it's quickly absorbed into your bloodstream, causing blood sugar levels to increase rapidly. This triggers your pancreas to produce more insulin, a hormone that regulates blood sugar. The more soda you chug, the harder your pancreas has to work. "Depending on your genetics, lifestyle, and weight, eventually your body can become resistant and may not be able to keep up the demand for insulin-and this is what leads to diabetes," says Lee Gross, M.D., director of diabetes and nutrition education at Fawcett Memorial Hospital.

Just how much sugar are we talking about in these drinks? A 20-ounce bottle of Coke contains 17 teaspoons of sugar; an equal amount of fruit punch has 18 teaspoons. The scary part? The average woman should aim to have no more than seven to 14 teaspoons of added sugar a day, and that includes sugar from cookies, desserts, and candy. So if you have just one large sweetened drink, you've already exceeded the recommended sugar limit. Drink any more soda and your risk of weight gain and eventually diabetes could start climbing.

"Imagine pouring that much sugar into a glass of water and drinking it," says Sharon Akabas, Ph.D., an associate research scholar at Columbia University's Institute of Nutrition in New York City. Ginger Fewell, for example, would have to dump 56 teaspoons of sugar into a water glass to equal the amount of sweet stuff she's getting from her steady supply

While soda and punch were found to directly increase your risk of diabetes in the Harvard study, nutritionists agree that any sugary beverage-even seemingly virtuous ones like vitamin-fortified water—comes with a devilish downside: too many calories. A can of ginger ale, for instance, has about nine sugary teaspoons. A grande Caramel Frappuccino with whipped cream delivers 13 hefty teaspoons. A bottle of Vitamin Water has eight. An eight-ounce glass of orange juice has five. At 15 calories per teaspoon, it's easy to drink your way to weight gain, which is the leading risk factor for diabetes. Even the Harvard team says being overweight or obese is more of a concern than the sugar you take in from soft drinks when it comes to your likelihood of developing diabetes.

Unfortunately, women who have a weakness for sweet drinks often tend to have other unhealthy habits, like regularly consuming sugary, low-nutrient foods, says Joy Short, R.D., an assistant professor of nutrition at St. Louis University. The women in the Harvard study back up Short's assertion. Those who drank the most soda a day were the least physically active and the most likely to smoke and gain weight. (The average woman's weight gain was more than 17 pounds during the eight-year study period-a far cry from the recommended goal of maintaining weight for overall good health.)

#### 20-oz soda 17 teaspoons of sugar (250 calories)



#### orange iuice 5 teaspoons of sugar



caramel

of sugar

13 teaspoons

#### sweetened frappuccino : iced tea

12 teaspoons of sugar (200 calories)

#### fruit punch

11 teaspoons of sugar (180 calories)



And anyone who buys those gigantic bottles knows how easy it is to inhale all 20 ounces in one sitting. One reason they never seem to fill you up: High-fructose corn syrup, the type of sweetener found in soft drinks, doesn't stimulate leptin (a hormone that tells your brain that you're full) the way other forms of sugar—like the kind that naturally occurs in an apple or an orange—do.

addicted to pop?

There's also new evidence that sugar may be habit-forming. A study from Princeton University found that rats actually seemed to be trying to avoid withdrawal symptoms by increasing their intake after a period of having their steady supply of sugar removed. "We have not proven that sugar is addictive, but it does have some features of substance abuse," says Princeton psychology professor Bart Hoebel, Ph.D. And last year, researchers at The Rockefeller University in New York found that rats that were allowed to binge on sugar showed opiate-like changes in their brain levels similar to changes in morphine-dependent rodents—an indication that the sweet stuff might produce a real (if mild) drug-like high.

Many experts believe that the appeal of sugar is actually more mental than anything else. "Cola was my emotional crutch," says Michele Casper, 36, of Dodgeville, WI, a style director for a clothing company. Until last year, Casper would drink a soda in place of breakfast, have another one at lunch, another at dinner—and usually a couple in between. "Whenever I felt overwhelmed at work, I'd say to myself, Let me just get a Coke and think this through. It calmed me down." This line of thinking hardly surprises Lisa Young, Ph.D., a nutritionist at New York University and author of The Portion Teller. "So much of what seems like true addiction is really about psychological craving," she says. "If you have something often enough, you start to feel like you'll go crazy when you suddenly can't have it."

breaking the habit

Any way you pour them, sugar-sweetened drinks don't do a body good. "It's liquid candy," says Akabas. Women who can't bear to forgo their lunchtime can of cola should consider how it fits into their diet's big picture, she suggests. Keep in mind that one soft drink easily fulfills your daily sugar quota—that means no Vitamin Water, sweet coffee drink, or even sugary dessert later on in the day. (Try having low-fat vanilla yogurt with sliced fruit to satisfy your sweet tooth.) Young's advice: "Pick one treat drink you really want, and then drink water, skim milk, or flavored seltzer for the rest of the day."

When you *do* indulge, choose the smallest size possible. And don't drink alone: If you pair a cola with a turkey sandwich on whole-grain bread, "the protein and fiber will help reduce a rise in blood sugar," says Short.

Or take a cue from former soda junkie Casper, who's shed 50 pounds in part because of quitting cola: "A few months ago, I put a dollar in a vending machine at work for a bottle of water," she says. "The machine was out of water, so I had to either choose something else or lose my money. I thought for a minute about buying a soda—and then I thought, Do I really need this for the five minutes of comfort it'll give me? Finally, I just walked away."

## the sip test

Thirsty? Before you grab a glass, here's a best-to-worst ranking of what's on tap.

#### v super healthy

**plain ol' water** Drinking six to eight glasses keeps the body humming and staves off thirst, which could keep you from reaching for a soda in the first place.

**skim milk** One cup has a third of your day's calcium, so drink up, says Sharon Akabas, Ph.D. It's good for more than just your bones. Research shows that a diet rich in low-fat dairy can help burn fat.

#### v so-so healthy

pure fruit juice One glass of OJ equals about four to six oranges—which means the sugar and calories add up fast. "Juice is a little healthier than soda because it's nutrient-rich," says Akabas—most glasses have 100% of your vitamin C needs, and fortified versions contain calcium and folate. But whole fruit is still better: You get all of the vitamins, plus fiber, and you'll feel fuller on fewer calories.

#### ▼ less healthy

diet. drinks "If I'm going to have a soda, I choose diet," says Joy Short, R.D. But while research shows that the sweeteners in diet drinks (like NutraSweet) are safe, the jury's still out on their long-term effects—so consume in moderation. That goes double for pregnant women. "One diet soda a day is unlikely to be very harmful if you're expecting," says Akabas. "But you might want to ask yourself whether it's something you really need."

#### **▼** not healthy

vitamin drinks "They may provide some nutrients along with the sugar and calories, but they lack the phytochemicals found in fruits and vegetables that help you reduce your risk of chronic disease," says Short. No time to get your nutrients from a plate of greens? Better to swallow a multivitamin with plain water instead.

**sweet; coffee drinks** "Frappuccinos and mochas might provide some calcium if they're made with milk, but the caramel and whipped cream in them make for an unworthy splurge," says Short. A healthier but still tasty way to treat yourself: Order a skim latte with one pump of flavored sugar-free syrup.

**fruit punch** Depending on the brand, these can contain some juice or none at all. But no matter what the ratio, the result is minimal nutrients with maximum sugar and calories.

**sugary soda** Try to drink it only on occasion—and savor it. Never drink one as a "background beverage."