



Laura Allahverdi thought nothing of getting into the driver's seat one evening in October 2004 after having two vodka cranberries. "I didn't feel intoxicated at all," says the 29-year-old life coach, who waited two hours after drinking before leaving the bar. Heading home in Suffolk County, New York, she was surprised when a police officer pulled her over. When he requested that she take a Breathalyzer test, Allahverdi complied—and learned that she'd registered a blood-alcohol concentration (BAC) of a little over 0.08, the legal limit nationwide. "He handcuffed me and put me in his car," she says. "I couldn't believe it." Just two drinks cost her a night in jail and an automatic license-suspension.

Like Allahverdi, you'd probably never dream of getting behind the wheel if you were drunk. Yet the number of women arrested for driving while intoxicated increased by 31.5 percent between 2000 and 2009. Now, more than ever, we're drinking socially, and not just on a Saturday night out; we're reaching for that Pinot or Pomtini to liven up book clubs and our kids' afternoon play dates. Meanwhile, study after study tells us drinking may protect against illnesses like heart disease and diabetes, making that nightly glass of wine feel like a good-for-you habit.

While experts agree that moderate drinking may have benefits, they also note that women have to be especially careful about how much they consume. Alcohol goes wherever there's water in your body—your tissues, your organs, your bloodstream. Generally, the more you weigh, the more water you contain, and the more quickly and/or easily alcohol is diluted in your system, meaning men (who tend to be bigger) will feel its effects less than women. Women also have a higher fat-to-water ratio than men do. So a 150-pound man holds more water than a 150-pound woman; after one drink, the woman will have a higher concentration of booze in her blood. That leads to greater intoxication. And her liver has to work harder to metabolize that alcohol, prolonging her buzz. "For every drink a woman has, it's the equivalent of a drink and a half for a same-sized man," says Harold Urschel, MD, author of *Healing the Addicted Brain* and chief medical strategist at Enterhealth Ranch substance-abuse center in Dallas.

# ARE YOU MORE BUZZED THAN YOU THINK?

By *Melanie Mannarino*  
Photography by *Terry Doyle*

*It's just a glass of wine... or is it?  
happens to your body and*

*Read on for the sobering truth about what  
DUI risk—on even a little bit of booze.*



➔ Adding insult to injury: In women, the enzyme aldehyde dehydrogenase (ALDH)—which breaks down alcohol in the stomach—can work less efficiently than in men, says Scott Walters, PhD, associate professor at the University of Texas School of Public Health. “One drink will get you drunk faster and take you longer to process out of your system than it would a man,” Dr. Walters says. No one’s telling you to stop enjoying wine tastings or a mimosa

at brunch. Be aware, though, that your seemingly safe drinking habits may be riskier than you realize—possibly leading you to make the most dangerous decision of your life. Just ask Allahverdi. “I was charged with a DWAI, or driving while ability-impaired,” she says. “My license was restricted for nearly a year, and I paid \$5,000 in fines. But it could have been worse—what if I’d hurt someone else, or myself?”



## HAPPY HOUR MYTHS... BUSTED

You’ve probably heard these around a cocktail party (or uttered them yourself). Sadly, that doesn’t make ’em true.

**MYTH #1 “A drink with diet cola will keep me sharp.”** Actually, it won’t, nor will sipping coffee keep you sober. “Having caffeine with alcohol is actually more dangerous,” Dr. Walters says, “because you feel more energized and may drink past what you should.”

**MYTH #2 “I have a high tolerance.”** Maybe—but that doesn’t mean it takes you more booze to get drunk; it simply takes you more alcohol to *feel* drunk. “There are people whose bodies process alcohol differently and who appear to have a high tolerance,” Dr. Walters acknowledges. “But that puts them at a higher risk of dangerous decision-making, because their bodies aren’t giving them the cues that they’ve had too much to drink.” Conversely, some people have an alcohol intolerance, which doesn’t get them drunk quicker, but does make drinking unpleasant. “About half the Asian population and a small percent of the rest of the population get flushed, headachey, dizzy, and even have heart palpitations shortly after drinking alcohol,”

Dr. Zakhari says. “They lack ALDH, so the toxins linger in their systems.”

**MYTH #3 “I’ve been here an hour and had one drink—I’m safe to drive.”** While it’s true that it takes one hour for men’s bodies to metabolize one drink, Dr. Urschel suggests that women wait at least an hour and a half, due to our unique physiology. Even then, he says, “you can’t trust your judgment once you’re buzzed,” and you’ll probably feel buzzed sooner than you think (see “The Real Toll of Two Drinks,” page 136). The longer you wait to drive, the more sober you’ll feel and the lower your BAC will be.

**MYTH #4 “I don’t get as drunk when I drink vodka.”** We wish. Truth is, any hard liquor will get you drunk just as fast—but darker liquors might make you feel worse the next day, Dr. Walters says. That’s because brown liquors (think: whiskey and rum) contain impurities called congeners, byproducts of fermentation that can bottleneck in the body while enzymes in the stomach and liver try to convert them to water, leading to intense hangovers.

## when “ONE DRINK” is really 2... or 5

One standard drink equals about 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of liquor—but there may be way more in your glass. Here’s why: **Different beers and wines contain different measures of alcohol by volume (ABV).** The ABV for beer is generally about 5 percent, but it can range from 3.5 for an Amstel Light to 6.8 for a Sierra Nevada Celebration Ale. Specialty brews can pack a greater punch: Samuel Adams Triple Bock has an 18 percent ABV. A bottle of wine can range from as little as 9 percent ABV to as much as 15 (most fall between 12 and 14). Check labels or ask your server to find out your drink’s ABV. **A pint doesn’t always equal a pint.** Drinking at a British or Irish pub? You might get served an imperial pint, which holds about 19 ounces. An American pint holds 16. **A glass of wine might really be more.** Wine glasses today can hold as many as 28 ounces—meaning you could get up to five servings of vino at once if you’re filling that goblet to the rim. **Mixed drinks are a mixed bag.** Ordering a gin and tonic? There’s no way to tell if the bartender had a heavy hand with the gin. And drinks with multiple types of booze may contain three or more servings of alcohol.

### this is one glass of wine

Since the standard 5-ounce serving of wine might look measly in a large, round goblet, bars and restaurants very often give a far-more-generous pour. We ordered vino at four local establishments to see just how much (or little) you really get in “one” glass of wine:



THE WINE BAR  
5 oz

THE LOUNGE  
6 oz



THE IRISH PUB  
7 oz

THE STEAKHOUSE  
8 oz

## the SCIENCE of

Wondering why one margarita makes you loopy while your friends can go back for seconds (or vice versa)? These factors might just explain it. **Your slim shape.** If you’ve ever been called a “light-weight,” it’s for good reason: The smaller and lighter you are, the fewer drinks it takes to get you drunk. Period. “There are fewer places for the alcohol to go,” Dr. Walters says. “Anything that isn’t diluted in the water in your body will cluster around your organs and take longer to process out of your system.”

**How much you’ve eaten.** The less food in your stomach before you drink, the faster alcohol is absorbed into your bloodstream, says Sam Zakhari, PhD, director of the Division of Metabolism and Health Effects for the National Institute on Alcohol Abuse and Alcoholism (NIAAA). So have a salad beforehand (any food works, not just greasy, fatty fare) or order pasta with your wine at dinner. Just don’t drink first and eat second, Dr. Zakhari adds. “By the time you eat, the alcohol will have already passed from your

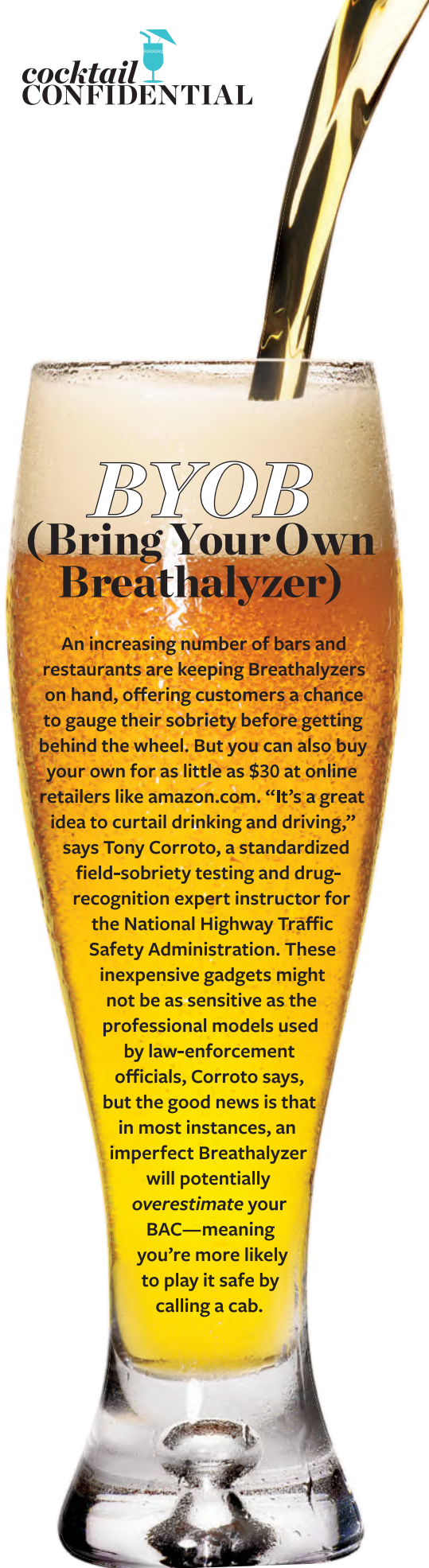
## getting sloshed

stomach to your bloodstream, and you’ll already be buzzed.” **When you last exercised.** No, working out doesn’t change how you metabolize booze—but it does release endorphins, which can decrease appetite, possibly stopping you from eating before you drink. “With no food to absorb it, more alcohol rushes into your system,” Dr. Urschel says. **What you’re drinking.** Champagne gets you drunk at a faster rate than other alcohol, likely due to the carbonation, according to a study from the University of Surrey in the

United Kingdom. “The gas bubbles irritate the walls of the stomach, stimulating the blood vessels to dilate and absorb more alcohol,” Dr. Zakhari says. Mixing booze with soda will also bring on a faster buzz, he says. **How much sleep you’ve gotten.** If you’re tired, drinking just a few sips could affect your coordination. “Alcohol lowers your inhibitions,” Dr. Walters says. “Usually the body compensates by being extra-alert, but if you’re tired, it won’t be able to stay focused.” Your reflexes will be off, and you’ll be more accident-prone.



*It’s no myth: Champagne gets you buzzed at a faster rate than other alcohol, research shows. Scientists speculate that carbonation’s the culprit.*



## BYOB (Bring Your Own Breathalyzer)

An increasing number of bars and restaurants are keeping Breathalyzers on hand, offering customers a chance to gauge their sobriety before getting behind the wheel. But you can also buy your own for as little as \$30 at online retailers like amazon.com. “It’s a great idea to curtail drinking and driving,” says Tony Corroto, a standardized field-sobriety testing and drug-recognition expert instructor for the National Highway Traffic Safety Administration. These inexpensive gadgets might not be as sensitive as the professional models used by law-enforcement officials, Corroto says, but the good news is that in most instances, an imperfect Breathalyzer will potentially *overestimate* your BAC—meaning you’re more likely to play it safe by calling a cab.



## BUT ISN'T BOOZE GOOD FOR ME?

Yes, drinking does have documented health benefits. Moderate consumption of any type of alcohol can increase your HDL, or good, cholesterol by about 12 percent, a 2001 science advisory by the American Heart Association suggests.

Furthermore, men and women who drink moderately have a 30 percent lower risk of developing type 2 diabetes, according to a meta-analysis published in *Diabetes Care*. And that’s just scratching the surface of research on this topic.

The million-dollar question: What does “moderate” drinking mean? Just one drink a day, especially for women, says Eric Rimm, ScD, an associate professor in the departments of epidemiology and nutrition at Harvard School of Public Health. Having two or more drinks a day can increase your risk of developing breast cancer by as much as 41 percent, according to a 1998 analysis published in the *Journal of the American Medical Association*; even that moderate one beverage per day is associated with a 10 percent bump in risk, Dr. Rimm says.

## the real toll of **TWO DRINKS**

We invited five women to enjoy cocktails with us and gave each a Breathalyzer test (we used the BACtrack S80 Pro Breathalyzer Professional Edition; \$250 at [breathalyzer.net](http://breathalyzer.net)) after each drink. Their BAC results vividly show how just two beverages can make the difference between being OK to drive home—and not.

NAME	DRINK	BAC, 1ST DRINK	BAC, 2ND DRINK	NOTES
JESSICA Age 24 4' 11" 118 lbs	WHITE WINE	0.059	0.057	It's no surprise that Jessica had the highest BAC at the table after her first drink (and eating dinner with her second barely lowered it); she's also the smallest.
CRISTINA Age 30 5' 4" 124 lbs	WHITE WINE	0.050	0.095	Cristina had just two drinks without eating—standard happy hour procedure for many of us—and wound up with a BAC well over the legal limit.
CAMILLE Age 35 5' 4" 150 lbs	RED WINE	0.036	0.081	Camille's BAC isn't as high as Cristina's after two drinks sans a meal—likely because her overall body mass is higher—but she still topped the legal limit.
CARA Age 38 4' 11" 155 lbs	BEER	0.027	0.025	After two drinks and dinner, Cara felt drunk—and, in fact, even though she's far from the legal limit, your alertness and judgment are already impaired at a 0.02 BAC.
ALISON Age 41 5' 9" 170 lbs	RED WINE	0.017	0.023	Alison's height and weight may have helped keep her sober, but so did drinking both glasses of wine while having a pasta dinner.