

Rhymes With Fool

In case you haven't heard (or simply haven't cared), a Juul puff is filled with cancer-causing toxins and addictive nicotine. Read on for a hit of reality about this dangerous habit.

BY MELANIE MANNARINO

School bathrooms are being fitted with sensors. There are sign-in sheets to pee. Flash drives have been banned. Students are Juuling—and adults are doing everything they can to stop it. That started long before September 2018, when the FDA declared Juul use an epidemic among teens and directed Juul and other brands (like Suorin, Logic, and Blu) to figure out how to prevent kids under 18 from using their products—or else risk being put out of business. Why the panic? Despite what you may think, there's a lot more than just mango (or strawberry or creme) flavoring in a Juul hit: It's loaded with nicotine, the addictive chemical found in tobacco that makes it hard, if not impossible, for smokers to quit cigarettes. If that's a surprise to you, you're not alone: 63 percent of people ages 15 to 24 surveyed by the Truth Initiative were not aware that all Juul juice (yep, *all*, including even the fruity ones) contains nicotine. That misperception may help explain why more and more teens in middle and high school are vaping. In a recent national study that surveyed students in 8th, 10th, and 12th grades, vaping (whether flavoring only, nicotine, or marijuana) increased over the previous year. Right now, the count is at 2.1 million teens. Don't be one of them. Read these facts, and then pass on the puff.



There Is No "Safe" Flavor
While every flavor produces toxins, it seems that some are worse than others because of their chemical makeup. So far, cinnamon and vanilla are the biggest offenders, says Mark Rubinstein, M.D., a vaping researcher, but there is no "healthy" flavor—not even cucumber.

PHOTOS: GETTY IMAGES/21

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Nicotine Addiction Can Happen Fast

Here's how it gets you: "Juuling makes me feel lifted and fun," says Elle, 15. "It can release my stress."

True, nicotine triggers a feel-good chemical in your brain called dopamine. The downside? It also gets your body addicted—which is no joke. Teens and young adults are even more susceptible to it, since your brains are still growing. That's good news when your brain is creating new connections that help you remember what's on an AP bio exam, but bad news if it's getting hardwired to crave a nicotine rush. "A Juul cartridge has as much nicotine as a pack of cigarettes," explains Mark Rubinstein, M.D., who has researched the toxic effects of vaping on teens.

Once you're addicted, your body needs nicotine to function—go too long without Juuling, and you're likely to get headaches and feel anxious and agitated. "You may have trouble concentrating in class," says Dr. Rubinstein. "And the only way to relieve it is to take a puff. If you don't get to vape, you'll go through nicotine withdrawal immediately."

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A Nicotine High Does Not Feel Good

It can happen with your first puff, and even with your twenty-first: It's a light-headed, sweaty, nauseous feeling, and it's not awesome. It's called feeling "nic sick," and it's a side effect of the direct hit of nicotine delivered with every puff. "I vaped for about five months," says Elizabeth, 15. "And each time, I felt sick for at least an hour afterward." Read what finally made her stop ("Why I Quit"), below.

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You're Inhaling Cancer-Causing Toxins

At last count, 99 percent of e-cigarette products sold in the US contain nicotine. So yeah, there's a 1 percent chance your vape juice is nicotine-free—but even that doesn't make for a healthy hit. Dr. Rubinstein and his researchers discovered that the flavors' ingredients create toxic volatile organic compounds (VOCs) when heated. And when you take a puff, those toxins shoot straight to your lungs.

"These flavors may be safe when eaten, but not when heated to the high temperatures required to vaporize them," he explains. Teens who vape have higher levels of five cancer-causing toxins in their bodies than those who don't, including the toxin found in car exhaust. Sure, you may breathe in car exhaust as part of daily life, but you probably wouldn't put your mouth up to a tailpipe and take a deep breath.

5 The FDA Is Cracking Down . . .

There have already been noticeable changes: Juul and other e-cigarette brands have switched their social media and advertising to be less focused on fun flavors like "blow juice" and more focused on the products' use as a cigarette alternative for adult smokers. Stores that sell the products, like 7-Eleven and Walmart, have been given warnings against selling to anyone under 18, and some have been fined for doing it. So if that local place near you used to be known for selling to teens, it might not be anymore.

. . . and So Are Schools

With a regular cigarette, you would never dare to sneak a puff by your locker, in the school bathroom, or behind a notebook in class. That's why administrators are getting tough (some schools are even removing bathroom doors)—and all students are dealing with the consequences. "I understand the problem," says Kate, 17, who doesn't Juul. "But the way they barge into bathrooms and bang on stalls is invasive. Especially since lots of times we're just changing for sports." Bottom line? Juuling isn't good for anyone.

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Secondhand Vapors Are Also Bad

Maybe you can't believe that walking into a bathroom that smells like a candy shop is that bad for you. "It usually doesn't bother me when other people Juul near me because it doesn't smell bad—it only bothers me when smoke gets in my face," says Leah, 17. "I don't think it's healthy, but I don't try to stop my friends from doing it," she says. Smartly, she draws the line at puffing herself. "I don't think putting chemicals in my body will result in anything good."

But let's be frank: If you can smell it, you're putting yourself at risk. According to one study, when people vaped, it reduced the air quality of the entire room, releasing carcinogenic pollutants. As for the long-term health impact of using e-cigarettes, there's no research yet because they're still a relatively new product. But you can bet that if the vapors are harmful in the short term, then they're not going to be good for anybody down the line.

"Why I Quit"

"I first tried to Juul at a sleepover, about a year ago. I was curious—but I didn't really like anything about it. It made me feel nauseous, light-headed, and dizzy. I didn't get the hype, but Juuling was so common, I thought it would be stranger for me to be against it. I did a couple hits a day off friends' Juuls for about five months, even though I was getting sick half the time. Then in March, I threw up from it. That's when I decided to stop. I wasn't worried about getting addicted, but I was worried about unknown health risks. Most of my friends still Juul, but I won't consider it, even when they offer." —ELIZABETH, 15, AS TOLD TO LILLIE RICE