



David DiSalvo (<http://www.forbes.com/sites/daviddisalvo/>) Contributor

*I write about science, technology and the cultural ripples of both.*

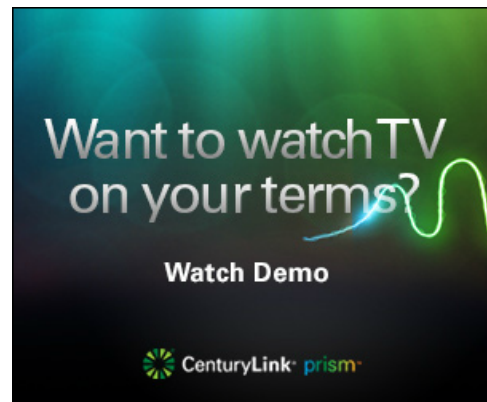
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# Why Eating A Marijuana Candy Bar Sent Maureen Dowd To Paranoia Hell

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New York Times' columnist [Maureen Dowd](#)



([http://www.nytimes.com/2014/06/04/opinion/dowd-dont-harsh-our-mellow-dude.html?\\_r=0](http://www.nytimes.com/2014/06/04/opinion/dowd-dont-harsh-our-mellow-dude.html?_r=0)) recently wrote about her unfortunate experience with a cannabis edible—a pot-laced candy bar she bought at a legal marijuana dispensary in Denver. Dowd took a nibble, and when nothing happened she took a few more. For a while she experienced no effects at all, but eventually they hit, and hit big. Quoting from her column:

“But then I felt a scary shudder go through my body and brain. I barely made it from the desk to the bed, where I lay curled up in a hallucinatory state for the next eight hours. I was thirsty but couldn’t move to get water. Or even turn off the lights. I was panting and paranoid, sure that when the

room-service waiter knocked and I didn't answer, he'd call the police and have me arrested for being unable to handle my candy." (["Don't Harsh Our Mellow, Dude" The New York Times, June 3, 2014](#)

([http://www.nytimes.com/2014/06/04/opinion/dowd-dont-harsh-our-mellow-dude.html?\\_r=0](http://www.nytimes.com/2014/06/04/opinion/dowd-dont-harsh-our-mellow-dude.html?_r=0))

Dowd's experience features the two most common side effects for inexperienced marijuana users: anxiety and paranoia. As she mentions in the column, the packaging for the edible she'd purchased didn't come with dosing directions. She was later told by a medical consultant that the candy bar was meant to be cut into 16 pieces for novices, not chomped down like a midday Snickers.



*English: one high-quality "bud" nugget of marijuana (Photo credit: Wikipedia)*

In comparison to the common street weed of yesteryear, today's medical marijuana strains are incredibly potent. Going even a little overboard can send a novice brain into a whirlwind. Ironically, pot is shown to ease anxiety symptoms when appropriately dosed, but has the exact opposite effect in too high a dose (when it comes to cannabis and anxiety, [less is definitely more](http://www.dailymail.co.uk/health/article-2575646/Cannabis-CAN-reduce-anxiety-levels-say-doctors-small-doses.html) (<http://www.dailymail.co.uk/health/article-2575646/Cannabis-CAN-reduce-anxiety-levels-say-doctors-small-doses.html>)). And edibles like candy bars and brownies pose a special problem because they are rarely sold with dosing instructions, and the percentage of [Tetrahydrocannabinol \(THC\)](http://en.wikipedia.org/wiki/Tetrahydrocannabinol) (<http://en.wikipedia.org/wiki/Tetrahydrocannabinol>)—the main psychoactive

component in marijuana—may not be evenly distributed throughout the edible. One nibble might contain almost nothing, while the next could send you spinning.

The symptoms Dowd describes in her column seem to be the result of an excessive amount of THC hitting the brain's danger alert system, specifically by ~~overloading~~ overloading the [cannabinoid](http://en.wikipedia.org/wiki/Cannabinoid_receptor) ([http://en.wikipedia.org/wiki/Cannabinoid\\_receptor](http://en.wikipedia.org/wiki/Cannabinoid_receptor)) (aka CB1) receptors in the amygdala.

The amygdala (<http://en.wikipedia.org/wiki/Amygdala>) are two almond-shaped brain structures set deep within the temporal lobes ([http://en.wikipedia.org/wiki/Temporal\\_lobe](http://en.wikipedia.org/wiki/Temporal_lobe)) of the brain that act as filters for our experiences, determining whether what's coming at us next qualifies as a threat. As part of the brain's limbic system ([http://en.wikipedia.org/wiki/Limbic\\_system](http://en.wikipedia.org/wiki/Limbic_system)), they are tightly interwoven with the “fight or flight” response. You might think of them as our brain's alarm trip wire, evolved to keep us from falling prey to anything out in the world that might do us harm.

In a 2011 study published in the *Journal of Neuroscience* (<http://www.jneurosci.org/content/31/14/5300>), researchers tested the THC-paranoia question in rats that were trained to fear certain smells. In the first part of the study, they blocked the CB1 receptors in the rats' amygdala, and found that the rats stopped responding fearfully to the smells as they'd been trained. But when the researchers unblocked the CB1 receptors and exposed the rats to a synthetic form of THC, the rodents experienced a hyper fear response to the same smells.

The implication from this study is that THC can escalate fear responses well beyond what's warranted—a psycho-emotional outcome better known to us humans as *paranoia*. Experienced users are somewhat seasoned against this side effect, but newbies who go too strong too fast are likely to get, as did Dowd, a nightlong trip through the paranoia horror house.

I think there's a lesson in Dowd's experience for both legal sellers and users of marijuana. For sellers, providing dosing instructions would be a splendid idea, as would enforcing quality control steps to ensure that edibles have consistent levels of THC throughout the product. For new users, the lesson is that taking it *very easy*—no matter what form of marijuana you're ingesting—is well-advised, unless you want to experience a version of Dowd's paranoia hell.

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***(<http://www.forbes.com/companies/twitter/>) @neuronarrative***  
***(<https://twitter.com/neuronarrative>), at his website The Daily Brain***  
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