

SPECIAL REPORT

CBDo or



CBD Don't?

When it comes to cannabidiol, confusion reigns supreme.
We're going back to the basics to clear it up for you.

by **LELAND RUCKER** and **STEPHANIE WILSON**

Disclaimer: The following conversation didn't happen—NOT EXACTLY, NOT WORD FOR WORD AS IT APPEARS HERE. BUT IT'S ROOTED IN REALITY. CBD IS ON EVERYONE'S MINDS, BUT INFO ABOUT IT IS ON NO ONE'S RADAR. IN THE LAST FEW MONTHS ALONE, WE'VE FIELDLED CALLS AND QUERIES FROM ACROSS THE COUNTRY, AS FRIENDS, FAMILY, AND FAMILY AND FRIENDS OF OUR FRIENDS AND FAMILY REACH OUT FOR ADVICE.

The questions below are on the lips of curious consumers who have heard they need to be taking CBDs but they don't quite know what this means. We're here to help. First thing's first: it's CBD, not CBDs.

Jane Doe: What is CBD?

CBD, short for cannabidiol, is a non-psychoactive chemical compound found in the cannabis plant.

Jane: So it'll get me high?

No, that's what non-psychoactive means. You're thinking of THC, or tetrahydrocannabinol. That's the compound associated with feelings of euphoria.

Jane: But you said CBD comes from cannabis. Isn't that what weed is called nowadays?

You are correct. Cannabis is how people refer to what used to be called "marijuana," a word with racist undertones best removed from the modern lexicon. Cannabis is short for *Cannabis sativa*, the scientific name of the plant species that includes both cannabis—the kind that gets you high—and hemp, the kind that doesn't.

Yes, it's confusing. Here's a handy cheat sheet:

***Cannabis sativa*:** plant species.

cannabis: a subspecies of *Cannabis sativa* containing more than trace amounts of THC. It remains federally illegal, classified by the DEA as a Schedule I drug, in the same category as LSD and heroin. The government claims cannabis has no medicinal purposes and a high potential of abuse.

hemp: a subspecies of *Cannabis sativa* with no more than 0.3 percent THC by weight. When the federal government outlawed "marihuana" in the 1930s, it did so using broad language that banned all *Cannabis sativa*—including hemp. The prohibition of hemp just came to an end last December, with the passing of the 2018 Farm Bill.

Jane: What does this have to do with CBD?

CBD is found in *Cannabis sativa* varieties, so it can be derived from both cannabis and hemp. But not all types (or strains) of either necessarily have any CBD content at all. Some have a high percentage of CBD. Growers breed plants to maximize or minimize the cannabinoid content.

So much
Goodness
to choose from, even our
Variety has
Varieties.



Dosing from **2.5 mg** to **50 mg** of THC, flavors from **Apple** to **Sour Cherry** and confections from **Gummies** to **Lollipops** makes your choice that much harder.

Because cannabis remains federally illegal, CBD derived from a plant with more than trace amounts of THC is illegal as well. This doesn't apply in the 10 states where recreational cannabis is legal. However, it is illegal to take it across state lines—but don't let that stop you.

As hemp broke free from prohibition late last year, the DEA reclassified hemp-derived CBD with less than 0.1 percent THC from a Schedule I to a Schedule V drug—one with a low potential of abuse, similar to low doses of codeine.

Jane: Are you saying the effects of eating a CBD cookie or two are the same as taking a dose of prescription cough syrup? That's intense.

No. Keep in mind, this classification is from the same agency that still claims cannabis is as dangerous as heroin—that highly addictive drug responsible for a growing number of overdose deaths each year as its popularity grows in the wake of the opioid epidemic. The DEA claims cannabis is just as bad. As heroin. This despite the fact that you are as likely to die from a cannabis overdose as you are from a unicorn attack.

But I digress. No, eating CBD cookies won't have the same effect as taking a codeine-laced prescription med, despite what the DEA would have you believe.

(The DEA rescheduling allowed for the first cannabis-derived medicine approved by the FDA for the treatment of a rare seizure disorder to enter the marketplace through typical pharmaceutical channels last fall. There are now two cannabis-derived pharmaceuticals on the market.)

CBD is a miracle compound, said to fix whatever ails you. Or not. Depends on which you trust—science or marketing.

Jane: So what are the effects of CBD?

There are all sorts of claims out there. But are any of those claims backed by science or data? Not really. A highly informative deep-dive into CBD published by Vox sums it up perfectly: "Anyone who tells you anything definitive about what CBD—or THC for that matter—does to your body is lying."

Cannabis prohibition, ongoing since 1937, outlawed more than personal use; it blocked scientific studies of the plant's medicinal properties and potential. Today, there's a huge void where research should be. That void has to be filled with the very basics that can be built upon. There's not even an official cannabis seed bank or strain database in existence from which scientists can pull reliable information needed to conduct the studies from which we are so desperate to learn the results. The process is basically just getting started, and it's going to take awhile. Decades even.

That said, there is strong anecdotal evidence as well as some small studies that point to medicinal properties and health benefits. Secretions from the flower of the cannabis plant contain more than 100 chemical compounds known as cannabinoids—CBD and THC among them—that interact and bind to receptors within our body's endocannabinoid system, which regulates basic functions like sleep, cognition, and stress. Cannabinoids such as CBC, CBG, CBN, THCa, THCv, and so on are said to provide relief to an array of symptoms and ailments—migraines, insomnia, stress, Crohn's, PTSD, Parkinson's, epilepsy, cramps, cancer, and more.

Like magic. Until science tells us otherwise.



DOS

By Javelina

The DOS line's first product launch is a Jupiter Research CCELL .5mL disposable cartridge touting all glass housing and a wick-less ceramic core heating element. We feel this is the finest disposable vaporizer on the market and the only mechanism fit to properly represent our oil. The oil housed within is comprised of a 1:1 ratio of THC and CBD. The THC is refined twice through our distillation process which offers a clean, potent, oil. This refined THC oil is then mixed with Colorado Grown, Colorado extracted CBD isolate. You won't find PG, PEG, VG, MCT or any other form of synthetic cutting agent in the DOS. In fact the only cutting agent used in our cartridges is Fresh Frozen, single source, small batch, strain specific Cannabis terpenes which are reintroduced at the same percentages seen naturally in cannabis flowers(3-6%). Combining the strain specific entourage effects of cannabis terpenes with the countless therapeutic effects of a 1:1 high cannabinoid oil guarantees a truly unique, enjoyable vaping experience. Don't just dab....Get DOS'd.

When one is not
enough, Get
DOS



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Jane: So what does taking CBD do?

Again, studies are limited, but the ones out there show that CBD is anti-inflammatory. It also can provide relief from anxiety and stress, induce calmness, and may even counterbalance anxiety brought on by THC in some cannabis users. That's part of something known as the entourage effect, but we'll save that for another day.

Jane: That's it? All this hype for something that may reduce anxiety and inflammation?

Yep. There's a whole lot of anecdotal evidence about it being an effective treatment for other ailments, but there's not a whole lot of science. Yet.

We can thank the prohibition for getting us here—to a place where a plant byproduct, federally illegal for all but the final 10 days of 2018, was a \$350 million industry in 2018. And that's by conservative estimates. *The Hemp Business Journal* puts that number closer to \$1 billion.

I blame savvy marketing and risk-taking entrepreneurs eager to capitalize on the post-prohibition "green rush."

CBD is everywhere right now—even in the gift bags at the Oscars in the form of infused chocolate and luxe lotions. You can smoke it, you can ingest it, you can drink it, you can vape it. You can spray it on your face, rub it on your body, or pay a massage therapist to do that for you. You can drop a bomb and soak in a bath of it, you can chew gum made with it, you can give it to Fido as a treat.

What you can't do is ignore it. CBD dominates headlines, piques interest, generates anecdotal testimonies to its healing powers, and is marketed to you by a growing range of companies introducing new infused products and new brands in hopes of capitalizing on the buzz. They don't all have your best interest at heart. Be skeptical.

Jane: But...I should be taking it, right? I've heard I should be taking it.

According to articles on the internet, you definitely should. It's a miracle compound, said to fix whatever ails you. Or not. Depends on which you trust more: science or marketing. Personally, I'm a sucker for marketing.

Jane: Me too! I think I read the same article. So, what's the best kind of CBD?

Oh my. There's only one kind of CBD. But there are all sorts of factors that affect its quality and your experience. Some factors to keep in mind:

- 1) Is it derived from hemp or cannabis?**
- 2) If it's derived from hemp, where is the hemp from?** The US imports a lot of hemp from China, where the list of approved pesticides is far from safe. You don't want to be ingesting that.
- 3) Is it a CBD isolate?** Was the CBD isolated from the other plant compounds during the extraction process? This is an important factor for anyone who's sensitive to THC or who may be subject to drug testing
- 4) Or is it full spectrum?** The opposite of an isolate, full spectrum refers to an extraction method that's sometimes called "whole plant extract." These include all of the cannabinoids found in the plant.
- 5) How will you ingest it, or get it into your body?** Are you smoking it, putting some drops of a tincture under your tongue, drinking a beverage infused with it?
- 6) How much are you supposed to take?**

There are millions and millions of CBD products being sold today, with more coming out every day. The market is largely unregulated, although the FDA does prohibit marketing CBD as a dietary supplement. New York State officials recently imposed rules blocking restaurants from serving CBD-laced menu items and drinks. Other than that, CBD is regulated a lot like the vitamin and supplement industries, which is to say not at all. Companies can't make claims about health benefits, but can make claims about what's in the product without any data to back it up. Last month, NBC Miami collected an array of CBD products and sent them to a third-party lab for testing. The majority had much less CBD than the labels claimed. Some had none at all.

Jane: How much CBD should I be taking?

No one knows. This whole CBD thing is an experiment, and we are all the subjects. If you use or are just curious about CBD today, you are at the consumer end of a great trial that includes users, growers, producers, sellers, and now government. Until more extensive research is done—which will take awhile—you're pretty much on your own to find the right products and dosages that work for you.

You've got to separate the hype from the reality. You've got to be willing to experiment, which can get pricey. If you spend \$50 on a bottle of CBD pain cream and it provides no relief, will you be eager to try a different brand? It's up to you. And your wallet. If the whole thing stresses you out, try taking some CBD. It's supposed to be good for stress. 