

The Beguiling Promise of CBD

YOU CAN FIND THE CANNABIS-BASED COMPOUND IN EVERYTHING FROM GUMMIES TO BATH SALTS—AND IT MIGHT HELP YOU BEAT ANXIETY, REDUCE PAIN, AND GET BETTER SLEEP, AMONG OTHER PROMISES. BUT THERE'S MORE TO KNOW ABOUT THIS SEEMINGLY UBIQUITOUS REMEDY, INCLUDING WHAT'S LEGAL AND WHAT ISN'T.

By Melanie Mannarino

I'M NOT WELL-SCHOOLED in the ways of cannabis. Until recently I didn't know my hemp from my weed. THC, CBD...IDK. It's like trying to get the square root of a number: If I concentrate for a minute, I can figure it out, but really I just don't care, you know?

Then my friend started selling CBD oil. She's a stay-at-home mom turned yoga instructor and a total straitlaced health nut. I thought, if she was into it, maybe I should learn more. So I found out CBD stands for cannabidiol, a natural extract from the flowers and leaves of the cannabis plant. It's not the chemical in marijuana that brings the high—that's the THC, or tetrahydrocannabinol.

There are still plenty of studies to be done, but so far science has shown that CBD appears to target more than 65 areas in the brain and body that are involved in regulating pain, mood, and sleep. Notably, CBD interacts with our endocannabinoid system, enhancing and balancing the messages sent via endocannabinoids and neurotransmitters. By doing so, it has the potential to lower inflammation, ease pain, bring a sense of calm, and improve sleep.

I want all those things. Inflammation can lead to aches, pains, and acne, and—yes, at the age of 47—I'd be happy to get rid of them. Given that my husband and son have nicknamed me Jelly Melly, I'm guessing I could also do with a deeper sense of calm. And I'm a busy working mom, so sure, I'll take better sleep!

THEY PUT CBD IN THAT?

Aside from oil tinctures (which come in small bottles with a dropper) and body balms, the ingredient is making its way into a wide array of items. The FDA has approved only one CBD product, the prescription seizure drug Epidiolex, and it's illegal to market CBD products as dietary supplements or add it to foods meant for animals or humans. But that hasn't stopped creative entrepreneurs from putting CBD anywhere they can think of (including food products that violate FDA restrictions):

- Bath salts
- Blemish cream
- Body butter
- Coconut oil
- Dog treats
- Energy drinks
- Eye serum
- Gummies
- Hair pomade
- Hand sanitizer
- Lip balm
- Lollipops
- Mozzarella
- Powdered beverage mixes
- Pulse-point roll-ons
- Soap
- Toothpicks

PROPS BY HEATHER GREENE FOR HELLO ARTISTS

THE SCIENCE BEHIND CBD

Until 2018, not even hemp—which contains less than 0.3 percent THC—was legal. As a result, U.S. researchers found it extremely difficult to conduct large-scale, randomized, placebo-controlled studies of CBD, Gruber says. But the existing research shows that CBD—short for cannabidiol, an extract from cannabis plants, such as hemp—plays a role in improving sleep and reducing anxiety and pain. “Some studies looked at small samples, but they are promising,” Gruber notes. In the near future, expect to see more comprehensive research, she adds. Here’s what experts currently know for sure.

CBD PREVENTS SEIZURES IN CHILDREN Epidiolex is the only FDA-approved cannabidiol medication. It’s used to treat seizures associated with Lennox-Gastaut syndrome and Dravet syndrome.

IT CAN HELP ALLEVIATE PAIN AND RELATED ANXIETY Seven days of low-dose CBD injections helped reverse chronic nerve pain and related anxiety in rats, according to a 2019 study in *Pain*.

IT HELPS WITH ANXIETY AND SLEEP DISORDERS Psychiatric patients who added CBD capsules (25 to 175 milligrams) to their standard treatment noted improved anxiety and better sleep, a 2019 study by Colorado researchers found. Also, a review of 49 medical studies concluded that CBD safely reduced anxiety behaviors related to social anxiety disorder, generalized anxiety disorder, PTSD, panic disorder, and obsessive compulsive disorder, among other conditions.

IT MAY FIGHT INFLAMMATION In a 2007 study (predating the CBD boom), orally administered cannabidiol relieved sciatic nerve constriction and inflammatory pain in rats.

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There are numerous CBD oils and balms (and drink mixes and bath salts and dog treats—see “They Put CBD in *That?*” on page 83), but I gravitated toward an oil by Beam for a couple of reasons: It’s THC-free (I’ve learned that some companies don’t filter out traces of THC—I’m not here to get stoned, people), and it’s broad-spectrum, which means beneficial plant compounds, like terpenes and flavonoids, are left in the extract.

I began taking a one-milliliter drop-perful of oil, containing 66.7 milligrams of CBD, morning and night. There isn’t an industry-standard recommended dose, so I started with the brand’s lowest potency. I held the drop under my tongue for a minute or so, in order for the cannabidiol to seep into my bloodstream rather than get digested (which is also a good delivery system—just not as direct). It tasted fine, sort of neutral, with a hint of plant life.

A few days later, I took my first barre class. I hadn’t worked out in a year, thanks to a shoulder injury, and I was nervous I’d be in serious pain afterward. It wasn’t too bad. After class, I rubbed some CBD balm on my shoulder. The idea behind balms and lotions is that CBD gets absorbed through the skin, without taking a trip under the tongue and through the bloodstream, so it goes straight to the receptors that need it most. The next day, I took a yoga class (all hail Groupon!), which didn’t leave me extra sore or strained either.

Could all this pain-free movement have been a result of the placebo effect? Sure. But I like to think my inflammation was kept in check by my new CBD regimen. Still, I’m no medical expert, so I reached out to Staci Gruber, PhD, an associate professor of psychiatry at Harvard Medical School and the director of the Cognitive and Clinical Neuroimaging Core and the Marijuana Investigations



for Neuroscientific Discovery program at McLean Hospital in Belmont, Massachusetts. She told me that anecdotal evidence and preclinical trials suggest CBD helps with pain and inflammation, but “we don’t have clinical trial data.” (See “The Science Behind CBD,” opposite page, for more on what researchers do and don’t yet know.)

Also, I stopped having nightmares. Weirdly, I get them a lot—like, I’m driving down the road and suddenly I’m in the ocean. That kinda thing. But since I started taking CBD oil, the nightmares haven’t come. My daily stressors remain the same, so I’m

totally giving CBD oil the credit. I also spoke to David L. Nathan, MD, clinical associate professor of psychiatry at Rutgers Robert Wood Johnson Medical School in New Brunswick, New Jersey, and founder of Doctors for Cannabis Regulation. He agreed there could be a connection: “All drugs that can help with sleep—and CBD may be one of them—will not affect just the onset and duration of sleep but also the quality of sleep,” he explained.

IS CBD EVEN LEGAL?

In 2018, the FDA declared that hemp, the plant from which CBD is derived, was no longer an illegal substance. (Cannabis containing more THC than hemp—meaning above 0.3 percent—is still federally illegal.) This newly legal status is why you can find CBD products of all types in brick-and-mortar stores and online. That same year, the agency approved the CBD-based drug Epidiolex for the treatment of two severe forms of epilepsy.

The FDA has issued strict guidelines regulating CBD, and last November, the agency warned 15 companies selling CBD products that they were in violation. What are some potential violations? Marketing a product as a dietary supplement, touting a health benefit or therapeutic use, or claiming a product is suitable for kids. The FDA also prohibits adding CBD to food, saying the ingredient hasn’t been proven safe for consumption by humans or pets. In March, the FDA released a statement reiterating that it has not assessed the efficacy or safety of any CBD product, besides Epidiolex, and calling for “reliable and high-quality data” on CBD from researchers.

Maybe all this haziness explains why my new life insurance carrier gave me a hard time after I revealed that I take CBD regularly. During my yearly physical, I listed it along with my allergy medication and birth control pills. No big deal, right? I thought so—until I got a phone call a few days later. The insurance rep asked why I took CBD, how much I took, what prompted me to take it, whether I’d ever used marijuana or other illegal drugs, whether I felt I was dependent on CBD...it was kinda scary, to be honest. I was worried I’d jeopardized my chance of getting life insurance. Luckily, I got approved, but the exchange told me there is still a lot of doubt about CBD out there, even among medical experts.



Inspired by my reduced chronic pain and stress-free slumber, I also started getting up at 5:50 a.m. for a brisk two-mile walk with my neighbor every morning. And yeah, I'm still taking barre and yoga classes. I've got energy for everything!

But the most concrete proof that CBD oil is doing good things for me came about two weeks after I started

taking it. I hadn't mentioned my new CBD routine to my husband, in part because I wanted to assess for myself whether it had an impact. But out of the blue one night while watching TV, he turned to me and said, "Hey, I'd like to thank you for not getting so frustrated lately with me and the boy. I appreciate it."

Yelly Melly has left the building.

KNOW WHAT YOU'RE GETTING

These days you can buy CBD products at national retailers (including Walgreens, CVS, and Whole Foods Market), your local street fair, or even the gas station. I asked Chris Martinez, president of the cannabis-testing facility Kaycha Labs (and chair of the Florida Hemp Council), how to make sure you purchase quality stuff.

ASK FOR LAB RESULTS

"Any reputable seller should have had a full compliance panel test done by a third party," Martinez says. A store or vendor may show copies of lab results upon request. If there's no hard copy, look for a QR code on the product. If you're buying online, look for a direct link. No lab results? "Do not buy it," Martinez says.

READ CLOSELY

A lab will test for potency, pesticides, microbes, residual solvents, and heavy metals, to protect consumers and patients from taking harmful contaminated products. "The test should clearly indicate that the product has passed each segment for cleanliness and potency, with a tested date and expiration date on the report," Martinez says.

CHECK THE CREDENTIALS

Look for watermarks on the lab results, Martinez says, and be wary of documents that look photoshopped.