

CBD is everywhere—endorsed by celebrities from John Legend to Kourtney Kardashian, available at Bed Bath & Beyond, popping up in dog treats. Last year, the CBD market was projected to grow by 14 percent, reaching \$4.7 billion in sales, according to recent data. Yet many of us still feel mystified by this alleged magic potion: Does it really work? Is it safe? Will I feel stoned? Here, we weed through the hype.

Everything You Ever Wanted to Know (but Were Too Paranoid to Ask)

HOW IS IT DIFFERENT FROM MARIJUANA?

CBD, or cannabidiol, is a plant compound that can indeed be found in marijuana and hemp, both of which belong to the species Cannabis sativa. Many readily available products include CBD that's been extracted from hemp, which contains only trace elements of euphoria-inducing THC (tetrahydrocannabinol)—the compound that puts the "wacky" in "wacky tobacky."

IS IT LEGAL?

Yes—with certain restrictions. The 2018 Farm Bill made hemp-derived CBD legal under federal law, but state laws still apply, says Morgan Fox of the National Cannabis Industry Association. Marijuana-derived CBD is available only through licensed dispensaries. "Marijuana-derived CBD isn't stronger than hemp-derived CBD," says Peter Grinspoon, MD, an instructor at Harvard Medical School and a Doctors for Cannabis Regulation board member. "But if you want a product that includes more than trace elements of THC, you'll need to go to a dispensary."

IS IT SAFE

Right now, the only FDA-approved use of CBD is for the epilepsy drug Epidiolex. "Safety studies have been conducted for that particular drug, so there's clinical evidence that CBD is relatively low risk," Grinspoon says. "We don't have long-term safety studies, so that is a bit of a question mark. But I've been a primary care physician for 25 years, and I like CBD more than a lot of things we'd prescribe for insomnia and pain, because it's nonaddictive and most patients tolerate it well."

If you're taking a prescription medication, check with your doctor before trying CBD, which can raise the level of blood thinners and other drugs in your bloodstream. And make sure your product is from a reputable source (see "How to Shop for It," page 104).

WILL IT MAKE ME HIGH?

It shouldn't. THC binds to receptors that release certain neurotransmitters in the brain to produce that groovy feeling. GBD doesn't, so it promotes relaxation without the high. However, it's often inaccurately referred to as "nonpsychoactive," says Stacia Woodcock, a pharmacist and dispensary manager for the cannabis company Curaleaf. "Psychoactive' means that it works on the mind, which CBD does. Otherwise, it wouldn't help with anxiety. But it won't sedate you. It's just calming—like the feeling you have after a long bath or a massage."

ARE WE SURE IT WON'T MAKE ME HIGH?

CBD can cause drowsiness, so start cautiously. "Just as with a new prescription drug, the first time you use it, you don't want to be out and about, in case you get sleepy or just don't feel like yourself," says Leslie Mendoza Temple, MD, medical director of NorthShore University Health System's Integrative Medicine Program in Glenview, Illinois. "But as long as you're not ingesting a product with more than 0.3 percent THC and you don't feel impaired, you should be able to take it and still dirive a car and go about your life."

Other possible side effects include headaches, a dry mouth, and gastrointestinal issues—another reason to test-drive it at home, near the comfort of your own bathroom. "One study showed that CBD is effective for anxiety related to public speaking," Grinspoon says. "But you don't want to have stomach problems right before you have to get up in front of an auditorium of 1,000 people."

CAN I PASS A DRUG TEST?

If your product is completely THC-free, you should be in the clear. But check the label, Woodcock warns: "CBD products can legally contain very small amounts of THC, which could potentially still show up on a test."

SO HOW DOES THIS STUFF WORK?

Scientists still aren't entirely sure, but research shows that CBD is a promising aid for anxiety, insomnia, and chronic pain. How could one plant compound work for all these conditions? "It almost seems like hocus-pocus until you



understand the endocannabinoid system," says Janice Newell Bissex, RDN, a holistic cannabis practitioner at Jannabis Wellness and the author of *Simple Guide to CBD*.

The endocannabinoid system includes a network of receptors throughout the body—in our brain, nerves, muscles, skin—that regulate functions such as appetite, temperature, and sleep. THC binds to some of these receptors like a key clicking into a lock, CBD interacts with the system in more complex ways. "It works with your body to maintain balance," Bissex says. "For instance our bodies naturally produce a cannabinoid called anandamide, from the Sanskrit word for 'bliss' CBD helps keep that anandamide in your system longer to exert its neutrocalming effect." Its balancing properties, she adds, can be beneficial for a number of issues, including sleep, stress, PMS or menopausal irritability, and pain.

Until 2018, the Drug Enforcement Administration classified CBD along with marijuana as a Schedule 1 drug (one with no current accepted medical use, and a potential for abuse), so research has been limited. "Most studies have been done with animals," Grinspoon says. "It looks like CBD is going to have amazing applications, but we haven't proven most of these things in humans yet. There are more human studies for THC because it's been researched by our government for decades, whereas CBD has more recently come into vogue."

In the meantime, CBD enthusiasm has led some companies to make claims that aren't supported by research. Last year, the FDA Issued warning letters to 21 companies that touted their products for such conditions as PTSD, childhood ADD and ADHD, and even Covid-19. "The marketing for CBD products has soared far above the claims," Grinspoon says. "We won't know until there are more human studies, which I believe will be more forthcoming now that CBD is no longer a Schedule 1 drug."

How to Shop for It

Because CBD products aren't regulated, you'll need to do a little homework. According to a 2017 study in the Journal of the American Medical Association, nearly 70 percent of CBD products sold online were mislabeled, containing either more or less CBD than their packages claimed; some even had traces of THC.



CHECK THE CONTENTS Make sure the company's products are independently tested by an accredited third-party lab. The website should feature a certificate of analysis; reputable companies will usually show it prominently with each product description. "You can see the amounts of CBD and THC and make sure the product contains no pesticides or solvents," Woodcock says.

PICK A FORMULA In general. "full spectrum" products contain up to 0.3 percent THC, "broad spectrum" products don't contain THC, and "CBD Isolate" products contain only isolated CBD (no other plant compounds, including THC). There are upsides to each: CBD Isolate allows manufacturers to get more consistent dosing and is less likely to trigger sensitivities. But some experts say CBD works best when combined with its fellow cannabinoids and other plant compounds, a phenomenon called "the entourage effect." "They work synergistically," Bissex says. "If I advise someone to eat broccoli, it's not just because of the vitamin A—there are also antioxidants and anthocyanins. I wouldn't just bluck one thing out."

If you're feeling adventurous, some experts believe full-spectrum products (with THC) are more potent due to the entourage effect. Again, most widely sold options don't contain enough THC to leave you mesmerized by the flashing blue light on your modem. "Products with less than 0.3 percent THC aren't likely to induce a high unless you have extreme sensitivity," Woodcock says. But stick to the dosage on the label, she adds: "The more you ingest, the more THC gets into your system, and the greater the potential psychoactive effect."

CHOOSE A DELIVERY SYSTEM You'd be wise to pass on the vaping oils, since research suggests vaping is bad for your heart and lungs. Other oral forms of CBD include capsules, gummies, and oils, which usually come in a dropper bottle—you place a few drops under your tongue or in the side of your cheek. Oils are thought to work the most quickly, since putting them under the tongue means they're more readily absorbed into the bloodstream. Capsules and gummies may take more time to kick in, but the effects may last longer. Both Grinspoon and Temple say the best method is...whatever you prefer. But if you go the

gummy route, beware: It's easy to pop those little morsels like candy—and there's nothing calming about GI distress.

To relieve muscular aches, balms and ointments might do the trick, Grinspoon adds. Research shows that CBD is anti-inflammatory and may work as a painkiller. But many topicals include other ingredients, like cooling menthol or warming capsaicin, so it's not clear how much pain relief is coming from the CBD itself.

How to Take It

GO LOW AND SLOW Because clinical research on CBD has been so limited, scientists aren't sure about optimal dosage. Most studies have used doses much higher than what you'll find in most hemp CBD products—600 to 1,000 milligrams a day. Many gummies have 10 to 25 milligrams," Grinspoon says. "That doesn't necessarily mean those doses aren't going to work. We just don't have clinical data to prove it." He recommends starting at the lowest possible dose and going up in five-milligram increments. Ask your doctor what's right for you.

CHASE IT WITH FAT Your system will better absorb CBD gummies and capsules if you add a snack with healthy fats, Bissex says. "I tell clients to have a few nuts or some full-fat yogurt. The CBD might take a few extra minutes to kick in, but the effects are going to last for eight hours instead of four hours."

GIVE IT TIME CBD isn't always an instant-gratification thing, Bissex notes: "One client told me she felt the antianxiety effects start around day 17."

Can I Give CBD to...

MY CHILD WHO HAS ANXIETY ISSUES? It's not a good idea. Of the few CBD studies that have been conducted on kids, nearly all have focused on those who experience seizures or who are on the autism spectrum. A small 2018 Israell study did find that CBD reduced anxiety in some kids with autism, but there's little scientific proof that CBD can help children in general. "We do know that CBD can cause liver damage in kids at higher doses," says Jennifer Griffith, MD, PhD, assistant professor of pediatric neurology at Washington University School of Medicine

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in St. Louis. "If I know it could cause harm and there are no high-quality studies that show some benefits—other than with epilepsy—I can't recommend it."

MY ELDERLY MOM WHO HAS ARTHRITIC PAIN?

This shouldn't be a problem. "I recommend GBD to my elderly patients who need help with pain management," says Andrée LeRoy, MD, a Los Angeles-based physician. "Over-the-counter meds, like ibuprofen and acetaminophen, can have deleterious side effects on the kidneys and liver when taken at higher doses over a long period of time. GBD is also processed through the liver, but research shows there's much less chance of developing toxicity with regular, recommended use." Still, make sure your mom talks to her doctor before trying CBD, LeRoy advises, to discuss dosage and medication interactions.

MY DOG OR CAT WITH BEHAVIORAL ISSUES?

It's complicated. "CBD can offer relief from pain, inflammation, and seizures, as well as prompt a calming response," says Elizabeth Frankenberg, DVM, a founding member of the Veterinary Cannabis Society. Though it's considered relatively safe, there can be side effects. "Sedation and diarrhea are the most common," Frankenberg says. Talk to your vet before you introduce it, especially if your pet is older or on other meds, she adds. Start with a low dose and call your vet if you see any adverse reactions.

What About CBD Beauty?

CBD can be found in skin creams, oils, even mascara. How much of the trend is science based and how much is hype? "CBD has anti-inflammatory properties, and research has shown it can quell liritated skin in the cases of acne, psorfasis, and eczema," says Mona Gohara, MD, associate clinical professor of dermatology at Yale School of Medicine. "Since inflammation is also at the root of the aging process, CBD may help slow down signs of aging as well."

That said, studies have been small or conducted only on rodents or via skin cell models, notes Hooman Khorasani, MD, a dermatologic and cosmetic surgeon in New York City, who coauthored a 2020 review of 44 studies of CBD's effects on skin in the Journal of Dermatological Treatment. Until there are bigger and better-controlled studies, he says, no one can be sure that a CBD-infused product will offer extra skin protection. "Research is underway, and we should know more soon," he adds. As for your mascara? "I can't think of any significant benefit to putting CBD in makeup." Gobara says. ■

We Tried It

REAL SIMPLE'S INTREPID STAFFERS WADED INTO THE WILD WORLD OF CBD PRODUCTS.

FOR DEEPER SLEEP



Mandara Dream Nighttime Gummies

Testers loved the light flavors (watermelon and tart apple), as well as the soporific effects. One said, "I slept well with no interruptions and experienced no sluggishness the next day."

To Buy: \$80 for 30: mandaracbd.com.

FOR GENERAL ACHES AND PAINS



Sunday Scaries CBD Tincture

"I had the worst neck pain from a stressful day, and the tincture seemed to soothe it," a tester said about this formula, with vitamins Bu and Da. "It also helped me sleep through the night, which has seemed next to impossible lately," **70** Buy; \$69 for 1 oz.; sundayscarieshemp.com.

FOR A MILD AND TASTY TREAT



Martha Stewart CBD Wellness Gummies

"Heaven!" one tester declared about the Berry Medley (there's also a Citrus Medley and a 15-flavor sampler). Though testers agreed that the gummies effects were mild, they adored the sophisticated taste and texture: "They're like those French sweets, plates de fruits. I'd put these out after a dinner party for a wind-down." To 8 us. \$35 for 30. shopcanopy.com

FOR A CHILL PILL



Pint CBD Full-Spectrum Hemp Extract + Ashwagandha Capsules

The capsules contain trace amounts of THC, but our satisfied tester reported she could pop one and still have her wits about her: "It's like having a glass of wine without the buzz." To BUY: \$40 for 30; vitaminshoppe.com (not available for delivery in all 50 states).

FOR SORE MUSCLES



Kind Lab Serenity CBD + Magnesium Salve

"It takes the edge off muscle and joint pain for several hours," said one tester, who appreciated the organic hemp, the gentle scent of essential oils, and the womanowned company. TO BUY: \$60 for 2 oz.; kindlab.co.

FOR A SOOTHING SOAK Extract Labs Deep CBD Bath Bomb



"They're almost too pretty to use, but I'm glad I did," our tester said. "The flower essences turn it into a spa experience." TO RUY: \$16: extractlabs.com