

CBD AND OTHER POT
COMPOUNDS THAT DON'T
DELIVER A HIGH ARE TOUTED
AS MINI MEDICAL MIRACLES,
BUT LEGAL AND REGULATORY
ISSUES REMAIN



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ixty-year-old George Ogburn first used CBD in 2014 to help wean himself off Percocet, a prescription opiate pain reliever he'd been prescribed after a near-fatal motorcycle wreck.

On June 5, 2008, Ogburn was riding his Harley-Davidson on his way to work at a home improvement store. It was the day before his 10th wedding anniversary, when a Honda Accord collided head-on with his motorcycle. Ogburn, a resident of Kenbridge, about 70 miles southwest of Richmond, has undergone four neck and back surgeries since then, and he was taking 180 Percocet pills and 150 Valium each month for pain relief.

"It was eating me up and messing me up," he says. A trip to Colorado in 2014, shortly after the state legalized marijuana, opened his eyes to the possibilities of alternative medicine. He began doing research and decided to try CBD.

"I didn't feel drugged, but I felt good," says Ogburn, who is currently seeking to own and operate a hemp company. "I didn't feel down or bummed out, and the pain was gone."

CBD, or cannabidiol, is one of hundreds of compounds derived from the cannabis family, but unlike its cousin THC (tetrahydrocannabinol), CBD doesn't produce a high, leaving behind the couchlocked, late-night fridge raids or paranoia often associated with THC.

CBD is being promoted as a cure for ailments ranging from sleep disorders to epilepsy, and it's popping up in products ranging from coffee and ice cream to tinctures and topicals. It's also found a home in the medicine cabinets of soccer moms, grandmas and millennials alike.



Few had heard of the compound until recently because the majority of cannabis research had previously been focused on THC, not hemp and CBD. With the budding legalization of medicinal and recreational marijuana slowly spreading across the country, paired with an increasing consumer spotlight on health and wellness and a desire to limit prescription meds, CBD is having its shining moment.

"CBD has become the poster child for the health benefits of marijuana," says Jenn Michelle Pedini, development director for NORML, a nonprofit advocacy group that seeks to reform marijuana laws. She's also executive director of its Virginia affiliate.

Esther Blessing, an assistant professor at New York University School of Medicine who's conducting a study of CBD as a treatment for post-traumatic stress disorder and alcohol use disor-

Jenn Michelle Pedini, development director for NORML ders, said in a New York Times report that CBD is "the most promising

drug that has come out for neuropsychiatric disease in the last 50 years."

But CBD has appeal because it's also being used to treat everyday concerns. Phillip Shepperd, a 27-year-old pharmacist from Richmond, says he tried a CBD tincture to aid with sleep and anxiety after hearing about it from a family friend. "I figured it was worth a try since it doesn't require a prescription," he says. "I was drawn to giving it a shot because I've tried other sleep aids, but mostly they knock you out, and you can feel it in the morning."

He describes CBD's effect as "subtle, yet noticeable." It took him several days to settle on a dosage that worked for him.

Although CBD appears to be beneficial, potential consumers should be wary of health claims. Aside from one drug recently approved for people with epilepsy, no other CBD product has federal Food and Drug Administration approval because of marijuana's Schedule I status, which makes it difficult to study in FDA-approved clinical trials. Most CBD products come with a label that states they have not been evaluated by the FDA and are not intended to "diagnose, treat, cure or prevent any disease or ailment."

Before taking CBD, consumers should consult with their doctor and be aware that it can take time to find the appropriate dosage and strength.

HOW IT WORKS, WITH SOME CAVEATS

Researchers believe CBD works through its interaction with the body's endocannabinoid system (ECS), which is associated with how the body maintains symptom balance, including modulating pain and inflammation.

Louis Duchin, a psychiatrist at Trinity Mental Health in Chesterfield, has been practicing medicine for 32 years. While doing research on the ECS, he read about CBD. Now he is one of almost 200 registered physicians, a number that continues to grow, in Virginia who can recommend it to patients. "Recommend" is the key word.

Because CBD is still considered illegal at the federal level, doctors can't prescribe medical cannabis, they can only recommend it.

Duchin says CBD can offer support, a necessary kick-start when the ECS is struggling to utilize its own endocannabinoids. "With CBD you're getting the benefits [of marijuana] without the risk," Duchin says. He believes CBD can treat inflammation, chronic pain and other conditions and hopes that research and clinical efficacy can expose the potential of CBD oils.

He recently recommended the compound to a 75-year-old patient who had smoked marijuana to alleviate pain from

> Boketto Wellness health boutique in the Museum District sells CBD products.

spinal stenosis, a condition that can put pressure on the spinal cord and nerves, but the patient had developed chronic pulmonary disease and could no longer smoke. CBD was the solution.

"I don't want to recommend something to patients if I think its snake oil," Duchin says. "CBD oil has the potential to be a well-tolerated, safe, effective, natural product that can treat anxiety disorders, and I think [it] has the potential to decrease opiate medications in treating opiate addiction."

But without FDA guidelines, purchasing CBD products can be akin to purchasing an automobile when the only information presented is from the car's salesman.

If consumers purchase cannabidiol products online or in other states, the only regulatory oversight applies to manufacturers operating under a state-reg-

ulated program. Some products on the market have been tested and contain no CBD, or even high levels of THC, presenting dilemmas for consumers.

Michelle Peace, an associate professor for the Department of Forensic Science at Virginia Commonwealth University and a forensic toxicologist, recently received a call from a CBD e-liquid user claiming he experienced a "harsh high" and intoxicating effects from a product.

Peace and her lab analyzed nine CBD e-liquid vapes. Four of the samples contained a synthetic cannabinoid typically found in the drug "spice", and the cough-suppressant dextromethorphan (DXM) was present in another. "Without federal oversight, what penalty is there for distributing low-quality products?" Peace says. "When communities police themselves, the opportunity for nefar-

"I'M INTRIGUED BY THE PROSPECT OF CBD BEING EFFECTIVE AND NOT HAVING THE PSYCHOTROPIC EFFECTS OF THC."

- EGIDIO DEL FABBRO, DIRECTOR OF PALLIATIVE CARE, VCU



CBD vs. THC **CBD** THC (Cannabidiol) $(\Delta-9 \ tetrahydrocannabinol)$ **FAMILY** Cannabis Cannabis DERIVED Hemp; Marijuana Marijuana FROM **EFFECTS** Non-intoxicating Intoxicating COMMON Treatment of insomnia, anti-inflammatory diseases, Treatment of glaucoma, chronic pain, insomnia, **USES** seizures, epilepsy, nausea, bipolar disorder, anxiety, nausea, anxiety; stimulates appetite, provides chronic pain; anti-tumoral and neuro-protective relaxation, anti-tumoral **LEGALITY** Illegal at federal level Illegal at federal level Legal for adult use in 10 states, Washington, D.C., and Legal for adult use in 10 states, Washington, D.C., the Northern Mariana Islands and the Northern Mariana Islands Approved for medical use in 33 states, D.C., Puerto Approved for medical use in 33 states, D.C., Puerto Rico, Guam and the Northern Mariana Islands Rico, Guam and the Northern Mariana Islands Approved for medical use in 17 states with CBDspecific laws tall short **HEMP MARIJUANA** fibrous bushy low in cannabinoids high in cannabinoids **PLANT PLANT** trace amounts of THC contains THC and CBD

ious activity is higher than what would otherwise be the case."

She supports robust clinical trials to discover the long-term effects and appropriate dosage of CBD but believes the gray area of legality and lack of regulation is a scary landscape for consumers. Since the study, she says, dozens of people have sent their products to VCU's lab to be tested, out of concern over what they may contain.

Several merchants selling CBD say they are cautious about where they obtain their products. "A lot of companies and brands, knowing that CBD has become popular, are trying to jump on the bandwagon and cutting corners," says Allison Walton, an employee of Boketto Wellness health boutique in the Museum District. "We're particular in sourcing brands, and we get to know them, where they grow it and their process."

Several doctors who have registered with Virginia in order to recommend the substance say they did so conditionally.

Danielle Noreika, medical director for inpatient palliative care services at VCU, focuses on pain and symptom management for patients with lifelong illnesses and has known about CBD for years. Despite recognizing CBD's potential and possessing a strong interest in medical interventions for her patients that pose benefits with low risk of harm, Noreika says registering was a proactive measure.

"I don't know until we have more evidence that I will be in a place of specifically recommending it," she says. Noreika finds the lack of standardized ingredients in CBD products a concern.

"We can't recommend a resource without being sure what the ingredients might be," she says. "Clearly, from our standpoint, it's much more straightforward to recommend an FDA-approved substance because we know what we're recommending. This is more challenging."

Egidio Del Fabbro, program director

of palliative care at VCU, says he's been interested in the possibilities of cannabis, both THC and CBD, in helping with appetite and nausea for his patients with cancer. "I'm intrigued by the prospect of CBD being effective and not having the psychotropic effects of THC," he says.

Del Fabbro believes in keeping an open mind and exploring alternative medicine, but he says clinical-trial evidence supporting CBD is slim. Although it's not necessarily being prescribed to patients who have life-limiting illnesses, it is in a variety of other settings. "What's really striking is CBD is being used in just about everything without any evidence, and I'm surprised there's not more interest from the federal government in presenting research."

LEGAL MATTERS/THE GRAY AREA

The most confusing and perhaps most important piece of the CBD puzzle for consumers: Is it legal?

"I have one simple answer," says NORML's Pedini. "No."

CBD is illegal at the federal level, and in Virginia.

The federal government lumps CBD in with Schedule I drugs, considered to have no accepted medical use and a high potential for abuse. Others on that list include peyote, heroin, LSD and marijuana, according to the United States Drug Enforcement Administration.

But states have been flexing their own rights, and so far the feds have turned a blind eye. Regarding CBD, the DEA and federal authorities have issued statements that although it is illegal, it's tolerated and off their radar. With a raging war on opioids, people snacking on CBD gummy bears to relax or rubbing CBD salve on their arthritic hands is the least of their worries.

The federal legal landscape of CBD could face changes with the passage of the 2018 Farm Bill, which as of press time awaits signature from the president after passing both houses of Congress.

In 2015, Virginia approved use of medical cannabis oil to treat intractable epilepsy and expanded the program last year for use in treating any diagnosed condition. CBD oils can be legally recommended in Virginia with a written certification from a physician registered through the Board of Pharmacy. In early 2018, The Virginia Board of Pharmacy chose five pharmaceutical processors from a group of 51 applicants to launch the state's first authorized growing



facilities — one-stop shops for growing, extracting and dispensing oils derived from marijuana plants. Maryland-based Green Leaf Medical won the initial contract to provide services to Richmond and parts of Southside.

Once the processors are in operation, which is projected to occur later this year, the oils they produce will contain at least 5 milligrams per milliliter of either CBD or tetrahydrocannabinol acid (THC-A), a form of THC that does not produce a high.

Pedini says that while CBD is widely accepted, users should be cautious. People have been arrested for CBD possession in Virginia and other states.

Henrico Commonwealth's Attorney Shannon Taylor says the county's focus on CBD is safety, not locking people up. "What we're trying to do is consumer protection," Taylor says. "We would support law enforcement reacting to a consumer protection issue by a mislabeled product."

The bottom line, businesses and consumers should be aware that they are handling a product that is unregulated, and in its infancy, which raises concerns for law enforcement - and consumers, says Mike Feinmel, deputy commonwealth's attorney in Henrico. "From a law enforcement perspective, nobody wants to see anyone suffering or deprived legally of a product that can help ease suffering, especially if medically recommended," he says. "But just because a product says CBD oil or puts a pot leaf on the container, it doesn't mean it has the CBD content that's contemplated."

"I THINK [IT] HAS THE POTENTIAL TO DECREASE OPIATE MEDICATIONS IN TREATING OPIATE ADDICTION."

- DR. LOUIS DUCHIN, TRINITY MENTAL HEALTH



Dr. Louis Duchin is one of almost 200 registered physicians in Virginia who can recommend CBD to patients.

INSIDER

A New School Standard

A program from a former chef at the world-renowned restaurant Noma works to reform school lunches in Richmond

aniel Giusti was chef de cuisine at what is considered one of the greatest restaurants in the world, the Michelinstarred gastronomic playground Noma in Copenhagen, Denmark. But after half a lifetime in the culinary field, Giusti was no longer content with serving elaborate meals in an intimate dining room for the upper echelon. He wanted to do more. He wanted to feed more people.

"I wanted to find a way to cook for a lot of people and, most importantly, a lot of people more often," Giusti says.

In 2016, he founded Brigaid, a program that places chefs in public school kitchens across the U.S. and introduces scratch cooking to kitchen staffs.

This school year, the pilot program, which aims to incorporate local produce in school lunches and provide students with more nutritious and flavorful meals, launched in Richmond at Armstrong High School on Sept. 3. After Brigaid's 10-week program finishes there, it will then move to Blackwell Elementary School for another 10 weeks, followed by Boushall Middle School.

"This is not a here today, gone tomorrow concept," explains Susan Roberson, director of school nutrition services for Richmond Public Schools. The goal is to eventually introduce Brigaid's program standards to the entire school system.

The 30-year public school system veteran (including a decade with RPS) had read an article on Brigaid before it officially launched, and she reached out to Giusti. The two remained in contact.

"When we started moving towards this [training] model in January, she was the first person I reached out to," Giusti says. "It takes someone who is willing to go a



little outside the box."

Many public schools lack the resources to properly train kitchen staff or invest in and implement change. The majority of school lunch workers are not required to have a background in the kitchen, and many do not.

"The more I researched the idea of school food, I realized there are challenges and hurdles, but also chefs that are perfectly suited to tackle them," Giusti says, noting chefs' familiarity with purchasing inventory, determining food costs and creating recipes.

The key for Brigaid is to find chefs who are motivated and ready to leave their egos behind, think unconventionally and develop recipes that fit within schools' cost and nutrition guidelines.

Giusti points out that while the conversation surrounding school food is

typically focused on nutritional guidelines and addressing childhood obesity, there is another side to the story. To be successful, chefs and staff must strike a balance between guiding children to eat healthier and simply making sure they're eating. "If it looks appealing or like something they want to eat, they'll eat it," Giusti adds. "Otherwise they're not, and kids will go hungry."

John Thompson, who will serve as Brigaid's district chef for RPS, has been with the company for a year, previously working with the New London, Connecticut, Public School System, where Brigaid initially debuted. Prior, he served as sous chef at Blue Duck Tavern, a Michelinstarred restaurant in Washington, D.C. But for Thompson, like Giusti, culinary accolades and satisfied diners weren't enough.

"I felt the need to do more ... and use

[these skills] in a different way that's more rewarding," he says.

Before kick-starting the program at RPS. Thompson was responsible for assessing the kitchen to determine what items such as pots, pans and knives were needed, as well as implementing new safety and sanitation standards.

Kitchen training is done on site and during normal school hours, so staff learn in a familiar environment. Thompson will teach them basic kitchen skills such as handling a knife, how to prepare food on a stovetop and how to execute recipes.

"In my short amount of time I've been with the staff, they have been very receptive," says Thompson, who recognizes that this can be an eye-opening experience. "The idea is to work with the staff and not work against them."

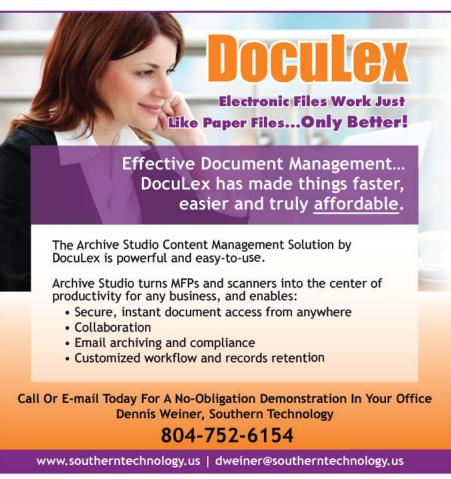
Menu tweaks will roll out slowly in order to ensure that students and staff are not overwhelmed. One week, fresh fruit may be added; the next, a sandwich may be made differently; and eventually new from-scratch entrees and other items will be introduced.

Because Richmond is a Community Eligibility Provision district, a federal designation for school systems with a highneed student population, students eat free of charge, and the funds for food are later reimbursed to the school. The Brigaid program will be self-funded and sustained through the reimbursement.

"I believe everyone can see we are moving in the right direction," Roberson says, "and Jason [Kamras, RPS superintendent,] and the team are the perfect fit to move forward with the changes we want to implement with school nutrition." R

On Nov. 3, as part of the upcoming Fire, Flour & Fork festival, Giusti will discuss the Brigaid concept along with hosting a \$1.25 school lunch throwdown, where chefs will prepare meals based around the National School Lunch Program nutritional guidelines and budget. (Note: Richmond magazine Associate Publisher Susan Winiecki is a co-founder of Fire, Flour & Fork.)











INSIDER

A Growing Opportunity

Legislation legalizes hemp and introduces a new crop to Virginia farmers

n May, Amy Hicks, owner of Amy's Garden, planted her first legal industrial hemp crop on 1 acre of her 20-plus-year-old farm in Charles City County. The fibrous stocks smell herbaceous and range in appearance from short and stubby to tall and skinny.

"We plant them about 6 feet apart, and they look like little Christmas trees when they're out there," Hicks says of the hemp, which she harvested in September.

The Hemp Farming Act of 2018 was enacted as part of the federal farm bill and removed hemp from its Schedule 1 controlled substance status, allowing it to be considered an agricultural commodity. In March 2019, Gov. Ralph Northam signed the Virginia Industrial Hemp Law, which meant hemp was no longer restricted to university research purposes in the state.

The move opened the floodgates of opportunity for farmers in Virginia, including Hicks, who describes hemp plants as "beautiful and intriguing, with so many great possibilities."

Hicks planted six varieties of hemp in an attempt to determine which would be the ideal strain. Planting and harvesting was exciting, but the process also proved difficult.

"It's so new, and that was a surprising thing," she says. "We're used to getting some seeds, growing them and everything goes along, but it was a new [crop], and there were unexpected challenges.

"But as farmers, we like to grow just about anything and try something new," Hicks adds. "Also, the possible health benefits associated

with it are pretty intriguing. We think food is medicine, so it seemed like a logical plant to grow."

In July, hundreds of individuals from farmers to lawyers gathered at Virginia

Visitors attend the Industrial Hemp Field Day at Virginia State University. State University for the sold-out Industrial Hemp Field Day, an exploration of the new law, the future of the crop and possible challenges. Hicks was there, along with Browntown Farms — one of the oldest black-owned and -operated farms in the state, located in Warfield in Brunswick County. Browntown, which is hoping to grow hemp in the future, provides peppers to the Richmond-based company Gourmet Hemp Foods.

According to Erin Williams, senior policy analyst for the Virginia Department of Agriculture and Consumer Services (VDACS), who also serves as the agency's industrial hemp grower and processor registration coordinator, as of October VDACS has issued 1,085 Industrial Hemp Grower registrations, 227 Industrial Hemp Processor registrations and 94 Industrial Hemp Dealer registrations. The state projects that more than 10,000 acres of hemp will be planted, and that 10 million square feet of indoor space will be dedicated to industrial hemp.

Hicks and other growers may choose to sell their crops either to a dealer or a processor. The biggest difference between the two is that processors are able to manufacture the hemp, which can be used to make CBD oil for medicinal uses.

> as fiber for rope and cloth, as animal bedding and feed,

in cosmetics and building materials, and

in food.

Hicks is searching for a processor to turn the plants she grows into CBD oil. CBD is one of hundreds of compounds derived from the cannabis family that produces no psychoactive affects and is promoted as a cure for ailments ranging from sleep disorders to epilepsy.

"We felt like our customers would be interested in this, and it fit in with what we currently offer," says Hicks, who envisions selling sublingual or topical CBD oil at markets. "I think there's so much out there, and people are confused by [CBD]. and I think we're fortunate we have a customer base where people trust us."

To legally possess the plants, seeds, leaves or flowers of hemp requires registration through VDACS. Hicks describes the process as simple and cost-effective (the fee is \$50). Hemp for human consumption must be approved by VDACS and also follow Food Safety Program guidelines.

Currently, there are no limits on how much hemp a farmer can grow, and farmers are not required to fence in a hemp field. VDACS may conduct random testing to ensure that the hemp is below 0.3%THC, the psychoactive component of cannabis. If it's over that limit, the growers will be required to destroy it.

Some people at the Industrial Hemp Field Day expressed concerns about accurate sampling, testing regulations from the U.S. Department of Agriculture, crop insurance and potential issues with law enforcement. While it is too early to predict the economic impact of hemp in the state, according to data compiled by New Frontier Data and provided by VDACS, hemp sales in the U.S. hit \$820 million in 2017 and are expected to grow to \$1.9 billion by 2022.

But the journey for hemp in Virginia is merely getting started, and Hicks says, "It feels good to be involved from the beginning and get this industry figured out." 🖪



