Goes Mainstream



CENTENNIAL SPOTLIGHT

Ine Power of CBD Everything You

Everything You Need to Know

COVID-19 How Cannabis Can Help **Relieve Anxiety** Mind & Body Healing **Going Green** Celebrities Lead the Way CENTENNIAL SPECIALS

Goes Mainstream



What's Legal Where You Live

Everything You Need to Know

COVID-19 How Cannabis Can Help **Relieve Anxiety** Mind & Body Healing **Going Green** Celebrities Lead the Way







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EDITOR'S NOTE

THE PLANT THAT **UNITES US**

"May you live in interesting times." The oft-quoted (and frequently misattributed) saying is both a blessing and a curse—and entirely fitting for this moment. The COVID-19 pandemic continues to wreak havoc on our health and way of life. Protests over long-standing racial injustices are playing out in our streets. And the messy November elections highlighted just how divided we are as a nation. Yet strangely enough, the one thing all of us (minus a few lawmakers) seem to agree on is weed. In this issue, we'll explore how it was by far the biggest winner on Election Day, with a record number of states voting yes on expanding their medical or adult-use cannabis programs. We'll talk to researchers (and patients) who think cannabis might be a tool in the battle against the virus. We'll share stories of some former felons now working in the legal pot industry and trying to bring racial and economic justice to those hurt by overly punitive laws. We'll explore some of the ways cannabis is helping us heal—literally!—as a treatment for numerous mental and physical ailments, and give advice for talking to your doc. In our interview with Jim Belushi. the actor turned pot farmer describes his cannabis crop as "light for the body," and asks "What's wrong with a little light? It's what people need." We could not agree more, especially now. -Shari Goldhagen

Veed 101

WELCOME TO THE EVER-EVOLVING WORLD OF CANNABIS! IF YOU'RE CONFUSED, DON'T WORRY: WE HAVE A GUIDE TO CANNA-BASICS, AS WELL AS THE LATEST NEWS IN THE WORLD OF THE PLANT. WE BREAK DOWN WHAT'S LEGAL IN EVERY STATE IN THE U.S., AND TAKE A LOOK AT WHERE WE STAND ON FEDERAL LEGALIZATION. CONSIDER THIS SECTION AN INFORMATIVE CRASH COURSE.



News

HERE ARE SOME OF THE CANNABIS STORIES MAKING HEADLINES.

of the Weed

"Every day is a discovery in this industry, and I am reading as much as I can," Stewart has said about cannabis

Martha Enters the Canna-Biz

■ OG lifestyle guru Martha Stewart became the latest celeb to throw her clout into the booming cannabis industry with the launch of a namesake CBD line in September 2020.

"I was surprised to learn that while most people have heard of CBD, less than 20 percent of us have actually tried it," Stewart said in a statement. "For me, that signals a lot of opportunity to create beautiful, elevated products that help people live well."

Under the umbrella of the Canadian cannabis giant Canopy Growth, Stewart's line includes gummies, oils and gels, ranging in price from \$30–\$40. The Martha Stewart Living magazine founder says she was closely involved in development, which may explain why products feature "gourmet" natural flavors including lemon, kumquat, blood orange and huckleberry. She also plans to launch a line of CBD skin care products.

Stewart was introduced to execs at Canopy Growth by Snoop Dogg, her good friend and co-star on VH1's Martha & Snoop's Potluck Dinner Party. The rapper's Leafs by Snoop line of marijuana products has been a hit with Canopy since 2015. But Stewart isn't about to step on her pal's toes. In a company video, she joked, "I'll leave the THC offerings to Snoop."





Pandemic? What Pandemic? Cannabis Sales Soar

While many retailers saw revenues plummet since the start of the COVID-19 pandemic in March 2020, global cannabis sales have risen to new highs. By the end of the year, sales are expected to reach \$19.7 billion, an increase of more than 38 percent compared to 2019, according to figures from the analytics company BDSA. The company predicts global cannabis sales will top \$47 billion by 2025.

"Cannabis sales [this year] have swung wildly in different states as a result of COVID-19," Roy Bingham, co-founder and executive chairman of BDSA, said in a statement.

In the U.S., where annual sales are expected to reach \$34.5B by 2025, dispensaries were declared an essential business in many areas, so they could remain open during shutdowns. It proved a windfall for some. "Sales in many U.S. markets performed stronger than expected, resulting in upward forecast revisions for Colorado, Illinois, Michigan, New Mexico, Oklahoma and Oregon," said Bingham. Alas, in places like Las Vegas that rely heavily on cannabis tourism, that wasn't the case.



Up in Smoke

Historic wildfires ravishing the West Coast of the United States could have devastating effects on this year's cannabis crop.

Some farmers in Oregon, Washington and Northern California found themselves right in the path of flames and saw their crops literally burn overnight. Dale Sky Jones, executive chancellor of Oaksterdam University

cannabis college in Oakland, expects there will be significantly less fresh flower available

in the region. As she told KRON4 news: "Any disruption is difficult to deal with; add to that COVID, on top of the fires. This is going to be

> a struggle." Even growers whose plants survived the inferno are worried lingering ash and smoke may have compromised crops. "The main concern is that the product itself has ash on it, and with the way [California] regulations go, that becomes problematic because we will fail testing for

foreign contaminants," Wendy Kornberg, owner of Sunnabis, Humboldt's **Full Sun Farms in** California, told KRON4.

Farmers will likely have to have plants tested at extraction labs, which could drive up costs. Still, Jones insists buying from a legal, state-authorized source is now more important than ever. "Not only are you helping everyone by paying taxes, but you also know you're getting a product that's been tested," Jones has said.

Blue Ribbon Cannabis?

Calling all hipsters! Pabst Blue Ribbon made a splash in the cannabis biz in October with Pabst Blue Ribbon Cannabis-Infused Seltzer.

While the nearly 200-yearold brand is known for its popular beer, this new beverage is actually an alcohol-free, lemon-flavored sparkling water containing 5 mg of THC.

The drink, which is currently only available in California, is also not technically a product of the Pabst Brewing Company. Because of federal laws outlawing marijuana in the U.S., the company is ineligible for a cannabis license. Instead, the PBR brand was licensed to a Cali-based cannabis company. Pabst Labs, which was started by former PBR employees.

"Our community has been asking us to do something in the cannabis space," Seamus Gallagher, PBR's senior brand manager, said in a statement. "Until the legal landscape changes, we can't produce this in house."

Though Pabst Brewing doesn't have a financial stake in Pabst Labs, it's a way to get a toe into the emerging THCbeverage industry. "Response has been overwhelming," Mark Faicol, brand manager at Pabst Labs. told NPR. "Ou challenge is really producing enough product to keep up with demand."

RIGINA LEMON

CINNABIS - INFUSE SELTZER

4

Green Drone says COVID "requires thinking outside the box and coming up with new ways of getting cannabis

Pot literally fell from the sky in Tel Aviv, Israel, on Sept. 3, when a flying drone dropped hundreds of baggies full of marijuana samples. The freebies were from Green Drone, a pro-pot legalization group, which broadcast the following announcement: "It's time my dear brothers. Is it a bird? Is it a plane? No, it's the green drone, handing out free cannabis from the sky.... Enjoy my beloved brothers, this is your pilot brother making sure we all get some free love." Though medical marijuana is legal in Israel, recreational weed still is not. Consumption and possession of small quantities has been decriminalized, but distribution remains on the books, and police seized over 100 of the dropped bags and arrested two suspects. "The distribution of a suspected narcotic substance is considered trafficking a dangerous drug... and the arrested suspects will be investigated," a police rep told the Times of Israel. Green Drone, however, was not dissuaded and said it would continue to make it rain weed to raise awareness of legalization

efforts, according to The Jerusalem Post.

It's Raining Weed



Wall Street Drops **Drug Tests**

The stock of cannabisusing financial pros is going up!

In May 2020, a New York City law went into effect making it largely illegal for employers in the city to force job applicants to submit to a test for marijuana use (the bill did make an exception for "safety-sensitive" industries, like construction). With many of the world's largest banks either based in the Big Apple or with significant offices therein, the law spurred a change in policy for many in the financial sector, according to a recent investigation by Business Insider (BI).

For any pro-pot banker on the hunt: A spokesperson for Goldman Sachs told BI they haven't tested new applicants "broadly" for any drug use for more than

a year, and prior to that, testing was not done for marijuana.

Charlotte, North Carolina-based Bank of America doesn't test new hires for drug use and hasn't in the past, a spokesperson told BI. Likewise, a Morgan Stanley rep said they don't test for cannabis or any other drugs.

Citigroup stopped marijuana drug testing as part of the hiring process, said a person familiar with the situation, "though there are exceptions for positions tied to federal contracts or for jobs where child care or operating heavy machinery are core functions."

Meanwhile, Zurich-based Credit Suisse and NYCheadquartered JP Morgan Chase both declined to comment on their policies.

Will Your Work Suffer if You Indulge After-Hours?

In a study of 281 workers and their immediate supervisors, researchers from San Diego State University and Auburn University found no evidence that job performance was compromised the next day by those who used marijuana after clocking out.

"The findings are obviously consequential for scholars and organizations who believe that all cannabis use negatively impacts workplace behavior," one of the study's authors, Jeremy Bernerth, PhD, said in Group & **Organization Management.**

Bernerth told the journal that marijuana use after work might even be beneficial in helping release job-related stress: "The relaxation induced by cannabis may help employees restore energy spent during the day and they may subsequently return with more stamina to devote to their job once they are back on the clock."



Marijuana Use During Pregnancy Linked to Psychosis in Children

Expectant women may want to pass instead of puff when the J comes around.

A study published in JAMA Psychiatry in September found a link between marijuana use during pregnancy and psychotic behaviors in children.

The "largest long-term study of brain development and child health in the United States," the Adolescent Brain Cognitive Development (ABCD) study followed 11,489 children over several years and evaluated their behavior and cognitive patterns at age 9.

Of the participants, 655 had been exposed to marijuana while in utero, according to statements of the biological mothers. When compared to the kids whose mothers had

not used cannabis while pregnant, those who were exposed were significantly more likely to display psychotic-like behaviors and have weaker cognitive abilities, as well as more attention, social and sleep difficulties. Results remained significant even when adjusting for confounding variables.

The negative effects were even more pronounced if the mother continued cannabis use after discovering the pregnancy.

"This study suggests that prenatal cannabis exposure and its correlated factors are associated with greater risk for psychopathology during middle childhood," study authors wrote in their conclusion. "Cannabis use during pregnancy should be discouraged."

Some Promising News for Pain Management

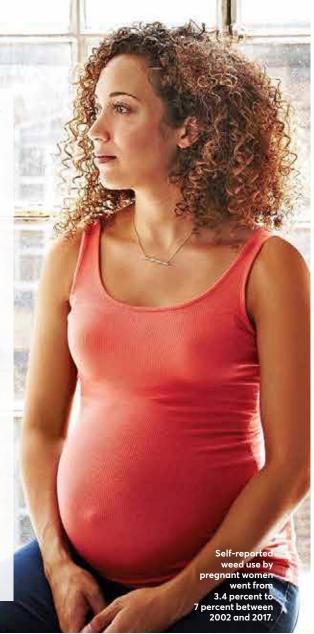
One more reason to consider swapping opioids for weed when it comes to pain management? A recent study by researchers at Canada's University of British Columbia Okanagan found that unlike opioid use, regular cannabis use didn't increase pain sensitivity

"This study should come as good news to patients who are already using cannabis to treat pain," said Zach Walsh, PhD, an associate professor of psychology at UBC and one of the study's directors. "Increases in pain sensitivity with opioids can really complicate an

already tough situation; given increasing uptake in cannabis-based pain medications, it's a relief that we didn't identify a similar pattern with cannabinoids."

Researchers looked at individuals who use cannabis more than three times a week and compared them to nonusers. Pain tolerance was measured by submerging participants' arms into ice water.

"Our results suggest frequent cannabis use did not seem to be associated with elevated sensitivity to experimental pain in a manner that can occur in opioid therapy,"



said Michelle St. Pierre, an MA candidate who worked on the study. "This is an important distinction that care providers and patients should consider when selecting options for pain management."



The number of deaths from opioid overdose in the U.S. in 2019.

Getting to Know You

CANNABIS CAN BE CONFUSING, BUT HERE ARE THE CANNA-BASICS.

BY SHARI GOLDHAGEN

The first knowr written record of cannabis use goes back to Chinese **Emperor Shen** ing in 2727 B.C.

h as THC and CBD can be adde to foods and beverages and onsumed orall

> CBD and THC, but here are other including CBN CBG and THC

out the basic info. Here's the 411. THE PLANT

Let's start with the name game. "The terms 'cannabis,' 'hemp,' and 'marijuana' are all used interchangeably in pop culture, but they mean very different things in reality," says Brett Gluth, head of digital marketing for BATCH by Wisconsin Hemp Scientific. "This leads to major misconceptions across most of the general public."

The overarching name for the type of plant is "cannabis"-if you want to get formal, it's Cannabis sativa L. Basically,

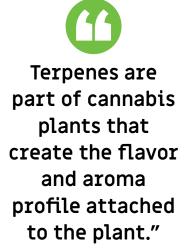
if you say "cannabis" when it comes to anything weed-related, you're probably going to be technically correct...but that might not get you what you're looking for. Kind of like saying "candy" and being disappointed someone hands you a peppermint instead of a chocolate truffle. Cannabis is then divided into main variants: hemp and marijuana.

HEMP

As defined by the United States Food and Drug Administration (FDA), hemp is the

hen it comes to cannabis, the times are a-changing. Marijuana dispensaries popping up next to trendy bars in posh neighborhoods. Everything from pet chews to hand creams boasting CBD as an ingredient. Stars like Martha Stewart, Jay-Z and Bella Thorne touting their own cannabis lines. But with everything that's out there, it's sometimes tricky to weed (pun intended)





—Jacob Hydra, founder of budinformer.com term for a cannabis plant that contains very little tetrahydrocannabinol (THC)– less than 0.3 percent by dry weight. This is important to note as THC is the psychoactive compound that produces intoxicating effects.

Hemp is the primary source of nonpsychotropic cannabidiol (CBD). "This 0.3 percent threshold is largely regarded as being arbitrary, but essentially is put in place so that people don't get high off hemp," says Gluth.

Hemp can also refer to the stalk of the hemp plant, which is used in all manner of building materials, fibers and textiles. You've likely seen clothing brands from Levi's jeans to Vivienne Westwood's haute couture dabbling in hemp fabrics. While eco-conscious, durable–and just plain comfy–hemp clothes absolutely won't get you high.

"Even though cannabis used for industrial purposes and therapeutic purposes are both called hemp, they still come from very different seeds," says Griffin Lynch, a chemical engineer and co-founder of BATCH. "For industrial purposes, people don't care about the cannabinoid levels; they're strictly after the fiber. For therapeutic purposes, growers want seeds that will give high yields of CBD and other cannabinoids, but low THC."

For decades, the U.S. government classified hemp as a Schedule 1 narcotic, which is the most restrictive classification and it means a substance is considered highly susceptible to abuse with no therapeutic value (reams of evidence tell a very different story, BTW). The Agriculture Improvement Act of 2018–aka the Farm Bill–reclassified hemp, essentially making it federally legal throughout the country, which is why CBD products became ubiquitous over the past few years.

MARIJUANA

Pot, hash, dope, the devil's lettuce, or the much-feared reefer. There is no shortage of nicknames for the other main variant of the cannabis plant, but technically it's called marijuana. And yes, this is the stuff that contains higher levels of THC and gets you high. "Marijuana is bred [through seed genetics] to have as much THC as possible," says Gluth. "Marijuana typically has a THC concentration of between 15 and 17 percent. It can be even higher, but this is rare at the moment."

Whereas hemp is largely grown outdoors, marijuana is more of an indoor plant, largely cultivated in greenhouses.

While hemp was given the green light by the federal government, marijuana hasn't been so lucky. Despite thousands of testimonials touting the benefits of medicinal marijuana (and of course, the millions of recreational users), it is still classified as a Schedule 1 drug–and it remains federally illegal.

You may ask: What about states that have medical marijuana programs or

allow adult-use cannabis for recreation? Well, even though 48 states have some type of medical marijuana program and the number of adult-use states expands with each election cycle, those are all still technically in violation of federal law. But before you trash your stash, it's important to note that beginning with the Obama administration, federal agencies have made it a policy not to prosecute cannabis-related violations in states that have made cannabis legal. Like we said, it's complicated (for more on the legal status of cannabis, see page 18).

COMPOUNDS

"Cannabinoids" is another term you've probably heard thrown around a lot. "Basically, these are chemicals found in cannabis," says Aaron Riley, CEO of the cannabis-testing company CannaSafe. "There are a bunch–current counts are over 113. I am sure there's more than we know about at this time."

The biggies right now are THC and CBD, but others hold intriguing possibilities. Cannabigerol (CBG), for example, is considered a minor cannabinoid (and is currently cost-prohibitive to extract); it has shown some of the medicinal properties of THC but is nonpsychotropic, like CBD. "It has been proven to help produce therapeutic effects and help with medical issues such as Crohn's disease and glaucoma," says Jacob Hydra, founder of budinformer.com, a community of cannabis growers.

"Terpene" is another weedy word you might be wondering about. "Terpenes are organic compounds that produce aroma and flavor," says Riley. "Terpenes are obviously present in cannabis. They are also found in many other plants and in some insects."

Common terpenes include limonene (found in citrus fruits), pinene (found in pine needles and rosemary), and linalool (found in lavender flowers). "Besides their signature smells, terpenes can also work with your body to produce measurable effects," says Gluth. "Lavender oil, for example, has been shown to reduce anxiety and pinene has been associated with energizing effects." **0.35%** The highest percentage of THC allowed by the FDA in a cannabis plant that is classified as hemp.

Different strands of cannabis have different terpenes and can thus produce different results in the body. Certain strains of marijuana, for instance, are known to be calming while others can cause paranoia. The "entourage effect" is a term for the benefits of having all the compounds of the cannabis plant present in a product. "This includes the many cannabinoids, terpenes and other organic compounds," says Gluth.

THE SPECTRUM

And that brings us to another potential point of confusion: the spectrum. Essentially, this is a measure of what manipulations have been made to the cannabis in any given product.



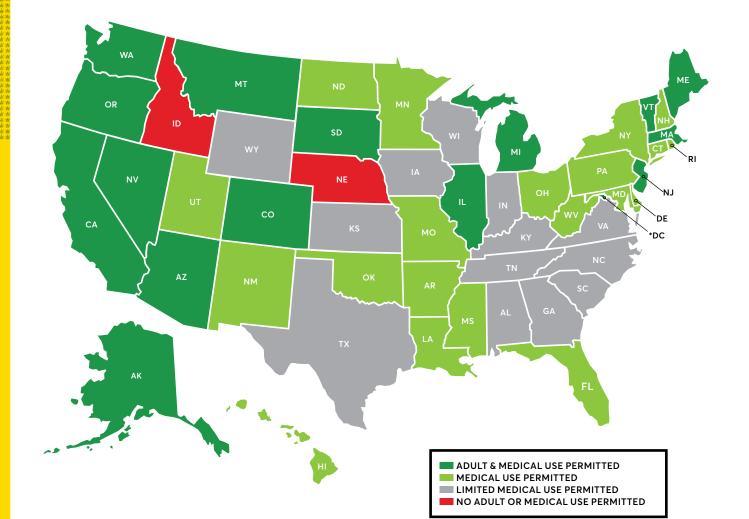


"Full spectrum means that a product includes all the natural compounds found in the hemp plant," explains Gluth. "Nothing is taken out. Whatever cannabinoids were present in the plant will be found in the full-spectrum extract." For CBD, this means that the hemp used may contain that legally allowed 0.3 percent THC.

Less common is broad spectrum. This refers to a cannabis product that includes most of the natural cannabinoids, but has specifically had all THC removed. While experts suggest broad-spectrum products are not quite as effective as full-spectrum products, this alleviates the risk for those looking to avoid even trace amounts of THC.

Finally, isolate products contain only one cannabinoid, most commonly CBD. An example is the epilepsy treatment Epidiolex (currently the only FDAapproved cannabis-derived drug), which is pure isolated CBD. For most people, however, isolate isn't the best option, according to Gluth. "These are therapeutically inferior to full-spectrum products due to the entourage effect. Simply put, when consumed together these compounds create a much greater benefit than when a single compound is consumed in isolation."

Still canna-fused? We feel you. But one of the best things you can do is get your cannabis from a respected source, says Riley. "Your best bet is to buy legal product from a reputable store (or dispensary) and brand."



What's Legal Where You Live

A STATE-BY-STATE GUIDE TO U.S. MARIJUANA LAWS.

merica is a jigsaw puzzle of cannabis rules. From decriminalization to medicalization to legalization, laws keep shifting from state to state. In November 2020, five states passed ballot measures legalizing adult-use and/or medical cannabis.

When the new laws are in place, 15 states and the District of Columbia will allow for recreational weed, while more than 30 states, plus D.C., will have decriminalized possession-meaning no arrest, prison time or record for most first-time possession for personal use offenses.

And all but two states currently have some type of medical program. Many require a medical marijuana card (MMC) or state registration. Keep in mind, most states don't have reciprocity with others, and marijuana remains federally illegal. Here's our state-by-state breakdown.

ALABAMA

In 2014, CBD use was approved by the legislature for certain conditions. Otherwise, marijuana is strictly prohibited, though a medical expansion bill is under consideration.

ALASKA ADULT & MEDICAL **USE PERMITTED**

One of the first decrim states (1975), Alaska legalized medical use in 1998 (there are nine qualifying conditions) and adult use in 2014 via ballot initiatives. Residents and patients can possess up to 1 ounce and homecultivate up to 12 plants.

ARIZONA ADULT & MEDICAL **USE PERMITTED**

The Grand Canyon State legalized medical use in 2010 and adult use in 2020 via ballot measure. It's now legal to possess up to 1 ounce and home-growing is also allowed. State-licensed dispensaries will begin recreational sales in March. Cannabis convictions will be eligible for expungement.

ARKANSAS **USE PERMITTED**

Medical use was approved in 2016 for 19 conditions (more can be added by petition). Patients can possess up to 2.5 ounces per 14-day period; homegrowing is not allowed.

Some form of medical marij is now legal in



48 states

CALIFORNIA ADULT & MEDICAL **USE PERMITTED**

One of the original decrim states (1975), Cali was the first to legalize medical use in 1996, followed two decades later with adultuse legalization. Residents can possess up to 1 ounce and grow six plants. Any debilitating condition is allowed, and medical sales are not taxed.

COLORADO ADULT & MEDICAL **USE PERMITTED**

An early decrim state (1975), Colorado was the first to legalize adult use in 2012 after passing medical use 12 years earlier, both via ballot initiatives. Residents can possess up to 1 ounce and grow six plants. Patients can possess 2 ounces for 10 qualifying conditions.

CONNECTICUT MEDICAL USE PERMITTED

The Nutmeg State legislature decriminalized adult use in 2011 and passed medical use a year later. Patients can possess up to

2.5 ounces for 29 conditions, but home-arowing is not allowed. A legislative effort to pass adult use is ongoing.

Voters approved medical marijuana in the nation's capital in 1998, but it didn't go into effect until 2011. Adult use passed three years later. Residents can possess 2 ounces and grow six plants; patients can purchase up to 4 ounces every 30 days. "Gifting" up to 1 ounce is allowed, and there is reciprocity for MMC holders in all jurisdictions.



DELAWARE MEDICAL USE PERMITTED

Medical use was legalized in 2011 and weed was decriminalized in 2015. For 16 conditions, MMC holders may buy up to 3 ounces and possess up to 6; homegrowing is not allowed. Adult use is under consideration.

DISTRICT OF COLUMBIA ADULT & MEDICAL **USE PERMITTED**

FLORIDA USE PERMITTED

Voters in the Sunshine State passed a ballot initiative to legalize medical use in 2016. Patients can possess 2.5 ounces, but they must buy from a medical marijuana treatment center and get a recommendation from a state-qualified doctor for any of 12 conditions.

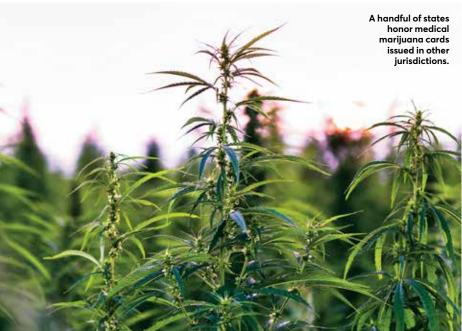
GEORGIA

In 2015, CBD use was approved by the legislature for certain conditions, and in 2019 the law was amended to allow products with as high as 5% THC (usually 0.3% is the limit). Otherwise, cannabis is prohibited in the Peach State.

HAWAII MEDICAL USE PERMITTED

The Aloha State passed medical-marijuana legislation in 2000 and

Many states allow for deliv of medical or adult-use cannabis



limited decrim (under 3 grams) in 2019. There are 13 gualifying conditions and patients are allowed to possess 4 ounces and grow up to 10 plants at a time.

IDAHO NO ADULT OR MEDICAL USE PERMITTED

Outside of what is permitted by the 2018 Farm Bill, the Gem State has no medical program.

ILLINOIS ADULT & MEDICAL USE PERMITTED

The state legislature legalized medical use in 2013 and adult use in 2019. Residents may possess up to 1 ounce; nonresidents half that. There are 41 qualifying conditions; purchases for these are taxed at lower rates. Patients can homegrow five plants and possess 2.5 ounces.

INDIANA LIMITED MEDICAL USE PERMITTED

In 2017, CBD use was approved by the legislature for certain conditions. Otherwise, cannabis is prohibited here.

IOWA

CBD—with up to 0.45% THC—is allowed for 15 qualifying conditions, but a CBD medical card is required and purchases must be made at state dispensaries. A task force on decriminalization is ongoing.

KANSAS

In 2018, CBD use was approved by the legislature for certain conditions. However,

products can contain no

2018 Farm Bill allows for

THC whatsoever (the federal

0.3%). Otherwise, cannabis

is prohibited in the Sunflower

State, though both medical

and adult use are currently

KENTUCKY

under consideration.

In 2014, CBD use

was approved by the

legislature for certain

conditions, but there is

no in-state distribution.

is under consideration

LOUISIANA

USE PERMITTED

The Bayou State legalized

medical marijuana

via legislation in 2015.

There are 16 qualifying

conditions, but smokable

Medical expansion

in the legislature.

growing are not allowed. MAINE ADULT & MEDICAL

USE PERMITTED

preparations and home-

One of the original decrim states (1976), Maine passed medical use in 1999 and adult use in 2016, both via ballot initiatives. **Residents and patients** can both possess 2.5 ounces and grow six plants. MMC cards are not required. Held up by the previous governor, the commercial market finally launched in October 2020.

MARYLAND **USE PERMITTED**

passed medical legislation state dispensaries. Homecultivation is allowed, but growers may not also buy from dispensaries.

MASSACHUSETTS ADULT & MEDICAL USE PERMITTED

The Bay State passed medical use in 2012 and adult use in 2016, both via ballot initiatives. **Residents can possess** 2.5 ounces and grow 12 plants. Patients can buy a 60-day supply from a licensed dispensary, tax free. Home-cultivation is permitted, but growers may not also buy from dispensaries.

MICHIGAN ADULT & MEDICAL **USE PERMITTED**

The Great Lakes State passed medical use in 2008 and adult use 10 years later, both via ballot initiatives. **Residents and patients** (for 13 qualifying conditions) may home-cultivate up to 12 plants, and possess 2.5 ounces in public and 10 ounces at home.

MINNESOTA MEDICAL **USE PERMITTED**

One of the original decrim states (1976), Minnesota was also the first state to pass a no-smoke medical law (2014). There are currently 13 gualifying conditions. MMCs are not required, but only cannabis oil products and topicals are available.

MISSISSIPPI **USE PERMITTED**

One of the original decrim states (1977), Mississippi voters approved a robust medical-marijuana program in November 2020. Docs can prescribe for 22 qualifying conditions, and patients will be able to purchase a two-week supply and possess up to 2.5 ounces.

MISSOURI **USE PERMITTED**

The Show Me State legalized medical use in 2018 via a ballot initiative. Patients can possess up

to 4 ounces and grow six plants. Possession is decriminalized.

MONTANA ADULT & MEDICAL **USE PERMITTED**

Voters passed two medical-use initiatives (2004 and 2016) and adult use in 2020. Once in effect, residents can posses up to 1 ounce and grow up to four plants for personal use. Adult-use purchases will be taxed at 20%.

> NEBRASKA NO ADULT OR MEDICAL **USE PERMITTED**

Despite being one of the original decrim states (1978), the Cornhusker State doesn't have any medical legislation on the books.

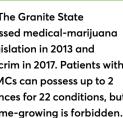
NEVADA ADULT & MEDICAL USE PERMITTED

The Silver State passed medical use in 2000, and adult use in 2016. Patients can possess up to 2.5 ounces and grow 12 plants; adult users can have 1 ounce and cultivate six plants. Reciprocity is permitted with other states.

MEDICAL **USE PERMITTED**

The Granite State passed medical-marijuana legislation in 2013 and decrim in 2017. Patients with MMCs can possess up to 2 ounces for 22 conditions, but home-growing is forbidden.

NEW HAMPSHIRE



The Old Line State in 2013. MMCs are not required, and patients can purchase up to 4 ounces-tax free-from

NEW JERSEY ADULT & MEDICAL **USE PERMITTED**

Medical-cannabis legislation passed in 2010 and Garden State voters gave adult use the thumbs-up 10 years later. With Gov. Phil Murphy's support, plans to implement adult-use sales are in the works, as well as decriminalization and equity policies. Currently, patients can purchase up to 2 ounces for 18 conditions.

NEW MEXICO USE PERMITTED

The New Mexico legislature passed medical use in 2007 and decrim in 2019. MMCs are required, but available free of charge, and there are 20 qualifying conditions. Patients can possess up to 8 ounces and grow 16 plants.

NEW YORK

An early decrim state (1977), New York passed medical use in 2014 and amended the decrim law in 2019, both via legislation. MMCs are required; dose is determined by physician for more than 20 qualifying conditions. No edibles or flower are allowed; homecultivation is prohibited. Adult-use legislation is being considered.

NORTH CAROLINA

One of the original decrim states (1977), North Carolina passed CBD legislation in 2014 with a THC limit of 0.9% (for qualifying patients under very strict rules), but otherwise has no cannabis laws on the books.





up to 2.5 ounces and grow 24 plants (each must be tagged by the Department of Health). MMCs are required, and possession is decriminalized.

SOUTH CAROLINA LIMITED MEDICA USE PERMITTED

In 2014, CBD use was approved by the legislature for seizure conditions, but products cannot exceed 0.9% THC. Otherwise, marijuana is strictly prohibited in the Palmetto State.

SOUTH DAKOTA ADULT & MEDICAL USE PERMITTED

The Mount Rushmore

patients with intractable seizures was approved by state legislature. Products cannot exceed 0.9% THC. Otherwise, marijuana is strictly prohibited in the Volunteer State.

Home growing is prohibited in

TEXAS

some states

use is legal.

where medical

In 2014, CBD use was approved by state legislature. The products cannot exceed 0.5% THC and are available only to registered patients with qualifying conditions. Otherwise, marijuana is strictly prohibited.

UTAH MEDICAL **USE PERMITTED**

In 2018, Utah voters passed Prop 2, legalizing medical use. Patients are allowed to possess up to 4 ounces, but homegrowing is not allowed. An MMC is required.



The Vermont legislature passed medical use in 2004, decrim in 2013 and adult use in 2018, but dispensaries aren't expected to sell recreational cannabis until October 2022. Residents and patients can possess 2 ounces and grow two plants; growers cannot also buy from dispensaries.

VERMONT

ADULT & MEDICAL

USE PERMITTED

VIRGINIA LIMITED MEDICAL USE PERMITTED

In 2015, CBD use was approved by the Virginia legislature. Due to the 5% THC limit, the Marijuana Policy Project has called

NORTH DAKOTA USE PERMITTED

North Dakota voters passed a ballot initiative in 2016 that allows patients to possess up to 3 ounces for 19 conditions. An MMC is required, and home-cultivation is not allowed. Possession has been decriminalized.

OHIO **USE PERMITTED**

One of the first decrim states (1975), Ohio voters rejected a legalization measure in 2015. The legislature passed medical use in 2016, minus flower and home-grow. Patients with state-approved MMCs can purchase up to 8 ounces for 21 conditions.

OKLAHOMA MEDICAL USE PERMITTED

Once the state with the most conservative marijuana laws in the country, Oklahoma now has a booming medical market following a 2018 voter initiative. Patients can possess up to 3 ounces and grow 12 plants. Reciprocity is permitted.

OREGON ADULT & MEDICAL USE PERMITTED

The first state to decriminalize marijuana (1973), Oregon was the third to pass adult-use legalization, via voter initiative in 2014. Voters in the Beaver State also passed medical use in 1998. Patients with 10 conditions

residents can possess 1 ounce and grow 4 plants. Home-cultivation is OK. **PENNSYLVANIA**

can possess 24 ounces

and grow 24 plants, while

MEDICA USE PERMITTED

In 2016, the PA legislature passed a medical-use measure that did not allow for smoking, vaping or home-growing. It was amended to permit vaping in 2018. MMCs are required for 17 conditions and homegrowing is still illegal.

RHODE ISLAND USE PERMITTED

The smallest state enacted significant medicaluse legislation in 2006 that allows patients to possess

State went from 0 to 60 in November 2020 when voters passed ballot measures to legalize both medical and adult-use cannabis. The law won't go into effect until July 2021, and dispensaries likely won't be operational for recreational use until 2022. Patients will be allowed to home-grow but the bill contained little direction on expungement for prior convictions.

> TENNESSEE USE PERMITTED

In 2014, CBD use for

the law a "quasi-medical marijuana law." Possession of up to 1 ounce was decriminalized in 2020.

WASHINGTON ADULT & MEDICAL **USE PERMITTED**

The second state to legalize adult-use marijuana, via ballot initiative in 2012, Washington allows residents to possess up to 1 ounce, but recreational users are not allowed to grow. Medical use passed in 1998, permitting patients to possess up to 3 ounces for

16 qualifying conditions; they can home-cultivate, as well.

WEST VIRGINIA **USE PERMITTED**

The Mountain State's legislature passed a medical-use measure in 2017 that did not include flower, edibles

or home-growing. Stateregistered patients can purchase a month's supply for 15 qualifying conditions.

WISCONSIN

In 2014, CBD medical use was approved by the legislature. But despite being one of the biggest hemp-producing states, all other cannabis is strictly prohibited in Wisconsin.

WYOMING IMITED MEDICAL

In 2015, CBD use was approved by the legislature for seizure conditions. Patients must register with the Department of Health, and extracts must contain less than 0.3% THC. Otherwise, marijuana is strictly prohibited in the Cowboy State.

One Under

MARIJUANA WON BIG

MARIJUANA WON BIG IN THE 2020 ELECTIONS, BUT THERE'S STILL A LONG WAY TO GO. BY SHARI GOLDHAGEN With marijuana still federally illegal, cannabis in the U.S. is a difficult landscape to navigate.

he 2020 U.S. elections in November showed just how divided the nation truly is. While former Vice President Joe Biden eventually eked out a win for the presidency, nearly half the country still supports Donald Trump, some so vehemently they refuse to accept the election outcome. And despite Democrats' hopes for a blue wave, both houses of Congress emerged decidedly split.

On one issue, however, there was a clear Election Day winner: weed.

Three states with existing medicalmarijuana programs–Arizona, New Jersey and Montana–had adult-use measures on the ballot, meaning that people over age 21 would be able to purchase recreational marijuana from state-licensed venues. In ruby-red South Dakota, which previously had no medical-marijuana program, voters were asked to approve both medical and adult-use cannabis. And Mississippi had two medical-marijuana initiatives.

Every cannabis ballot measure in every state passed with more than 50 percent of the vote (even with vocal opposition from governors in Montana, South Dakota and Arizona).

"Despite the clear division in federal politics, cannabis made a clean sweep in this election," says Jason Warnock, a cannabis adviser for Applied DNA Sciences. "In less than 10 years, the U.S. has moved from prohibition to a [partially] legalized country. The momentum toward full legalization and international commerce now seems inevitable."

Once the five new state programs are implemented, 15 states plus the District of Columbia will have adult-use markets, while 36 states (plus D.C.) will have approved medical markets. And it's extremely likely that left-leaning states, such as New York and Connecticut, will follow suit with adult use soon.

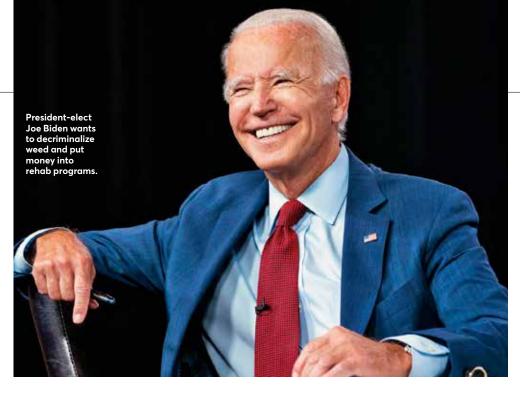
None of this is entirely surprising. A recent study found nearly two-thirds of U.S. adults believe marijuana should be legalized and only 8 percent feel it should be illegal in all circumstances. Yet federal laws tell a very different story.

THE FEDERAL CONUNDRUM

For those in states where you can buy THCinfused gummies at a dispensary, it might be a buzzkill to realize marijuana remains illegal on the federal level. Though hemp (and thus CBD) was reclassified as an agricultural product by the 2018 Farm Bill, marijuana is still a Schedule 1 drug under the 1970 federal Controlled Substance Act (CSA), meaning that, according to the Food and Drug Administration, it has no therapeutic value and is highly susceptible to abuse, explains Frank Borger Gilligan, an attorney specializing in cannabis law with the firm Dickinson Wright.

"The Constitution gives certain powers to the federal government, certain others to the states, and others are shared," says Gilligan. "Controlled substances, such as cannabis, are regulated at both the federal and state levels. So if a particular state decides to decriminalize or legalize medicinal or adult-use cannabis under state law, it has no effect on the federal law. The federal government remains free to prosecute."

So, yes, technically if the U.S. government were so inclined, it could come after cannabis users and businesses, even if they were operating within state



statutes. During the Obama administration, Deputy Attorney General James M. Cole released a memorandum in 2013-commonly called the Cole Memosaying the Justice Department would not interfere with cannabis businesses operating legally in individual states. But President Donald Trump's first attorney general-the vehemently antidrug Jeff Sessions-rescinded the memo in 2018, leaving cannabis purveyors and consumers in a state of uncertainty.

Making matters more complicated, states don't have reciprocity with their laws. Your medical-marijuana

> Percentage of U.S. adults who favor legalizing marijuana, according to

a 2020 Gallup poll. That's the highest percentage in the past five decades.

prescription in Colorado doesn't necessarily mean anything in Florida.

"If you obtain cannabis legally in your home state, but carry it across state lines into a state where it is illegal, you can be prosecuted in that state," says Gilligan. "Once you cross state lines, you are subject to the laws of the state you are in."

That's what happened to Sean Worsley. A Purple Heart recipient who suffers from PTSD, Worsley was arrested in Alabama-where all marijuana is illegaland sentenced to five years' probation after a police officer searched his car and found vials of marijuana that had been prescribed by Worsley's doctor in his home state of Arizona. The charge and conviction caused Worsley and his wife, Eboni, to become nearly penniless. After years of struggling to comply with requirements, Worsley's probation was revoked and he was sentenced to five years in Alabama's notoriously violent Department of Corrections. After a slew of activists became involved, the Alabama Board of Pardons and Paroles granted Worsley parole, but the damage was done, says Leah Nelson, research director at Alabama Appleseed Center for Law & Justice, who worked on the case.

"I fully support medical-marijuana and adult-use programs, but from a justice perspective it's important to also decriminalize marijuana," says Nelson. "Most people arrested for cannabis don't go to prison, they get some type

While the majority of the population may support cannabis legalization, Republican lawmakers have historically quashed legalization efforts."

-Brandon Beatty, CEO and founder of Bluebird Botanicals

of probation-but once you're convicted, that stays on your record, and even a short time in jail can disrupt your life." Nelson encountered one man in his

60s who spent 15 months in jail because he couldn't make bail while waiting for his trial. "He lost his business, and it shattered his family-he lost everything because he had a single joint," she says. "The dangers of the war on drugs so vastly outweigh the dangers of decriminalization, it should be no question."

Differing state laws and federal prohibition also make it very difficult for legal cannabis businesses to operate, as they have limited access to services like banking. This makes it hard for small-business owners to get lines of credit or loans. "This is a business that's legal, but you still have people burying money out in the desert because so many of them have to be all cash," says Warnock.

While federal changes wouldn't be a cure-all, it would definitely be a step in the right direction, says Brandon Beatty, CEO and founder of Bluebird Botanicals, whose activism helped with the passage of the 2018 Farm Bill.

"Federal legalization is important," he says. "First, it would put an end to the disproportionate punishment of the people of color who have had their lives upended with nonviolent cannabis convictions. Second, it would fully open up the life-changing benefits of cannabis to everyone in the country, not just those living in states where it's currently legal. It also would allow greater access to resources for cannabis businesses, which are currently operating with restrictions and limited access to important business services like banking, credit card processing and advertising. Finally, federal legalization would stimulate the economy by generating scores of new jobs and revenues."

A TURNING POINT

The incoming Biden administration will likely be much more pro-weed. The president-elect has said cannabis should be decriminalized and prior convictions expunged. "Wipe out the record so you can actually say, in honesty, 'Have you ever been arrested for anything?' You can say 'no,'" Biden has said. "We're going to pass a law saying there is no background you have to reveal relative to the use of marijuana."

Vice President-elect Kamala Harris, meanwhile, has expressed a desire to legalize marijuana, and vows it will be an issue where she will use her experience to try to move Biden's position to the left, saying, "I

spective and always be honest with him." But with a divided Congress, it won't be easy. While the American people might be pro-weed, many Republican legislators have been less than receptive.

One bill already on the table, "The Marijuana Opportunity Reinvestment and Expungement (MORE) Act...would effectively decriminalize cannabis at the federal level and establish a process to expunge convictions of cannabis-related offenses," says Beatty. While it was approved by the House Judiciary committee in early 2019, it only received two Republican votes in favor. It's set to go to the full house in December. But with Republicans likely to maintain control of the Senate (pending two run-off elections in Georgia in January) the bill is unlikely to advance.

"The chance is zero, zilch," says Edward Forchion, aka "NJ Weedman," a longtime marijuana activist and "perennial candidate for various New Jersey elected offices," as he's been described. "It is not going to get anywhere in the Senate. The 'do good' Southern senators will not pass it-they've got evangelicals holding pitchforks to their backs on this issue. It's not even a pipe dream."

> Warnock adds that some in law enforcement have also been lobbying hard not to pass any sort of federal legalization because expungement would likely lead to releasing scores of prisoners. "Their argument has been that there are people who are in jail for cannabis offenses because those were easier

convictions than more serious crimes that they may have committed," he says.

Still, he's optimistic about legalization eventually becoming the law of the land. "The moral arguments have been debunked and there's just too much money to be made," he says.

While one nation under weed might be a ways off, everyone can do their part to move progress along. "Contact your state congressional representatives and encourage them to support cannabis bills," says Beatty. "And consider becoming a hemp supporter with the U.S. Hemp Roundtable, so you can be updated on critical matters...and partake in grassroots efforts."

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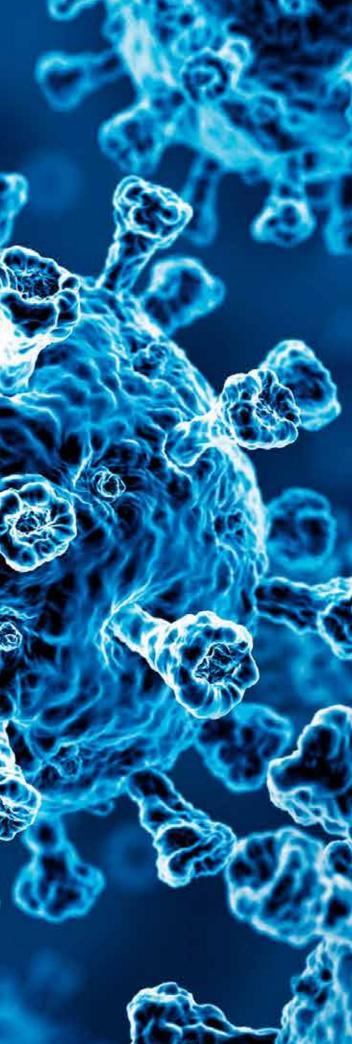
promised Joe that I will give him that per-

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Vellness

POT IS MORE THAN A PASTIME; ITS ANTI-INFLAMMATORY AND PAIN-RELIEF PROPERTIES MAKE IT SOMETHING OF A MEDICAL MIRACLE. LEARN HOW CANNABIS CAN BE USED TO TREAT A WHOLE SLEW OF PHYSICAL AND MENTAL HEALTH AILMENTS. FIND OUT WHY RESEARCHERS THINK CANNABIS CAN HELP WITH COVID-19, AND HEAR FROM AN EXPERT WHO EXPLAINS HOW TO TALK TO YOUR DOCTOR ABOUT MEDICINAL MARIJUANA.



th Plant

FROM ARTHRITIS TO EPILEPSY, MEDICAL **CANNABIS CAN** HELP TREAT SCORES **OF AILMENTS WITH** ALMOST NONE OF THE SIDE EFFECTS **OF TRADITIONAL** PHARMACEUTICALS.

Doctors must undergo training and certification to prescribe medical cannabis.

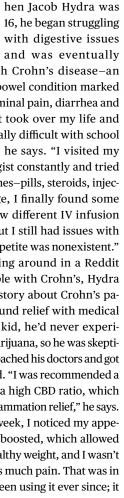
diagnosed with Crohn's disease-an inflammatory bowel condition marked by severe abdominal pain, diarrhea and weight loss. "It took over my life and made things really difficult with school and athletics," he says. "I visited my gastroenterologist constantly and tried various medicines-pills, steroids, injections. In college, I finally found some relief with a few different IV infusion medications, but I still had issues with pain and my appetite was nonexistent."

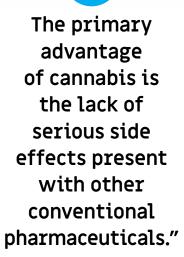
While scrolling around in a Reddit group for people with Crohn's, Hydra came across a story about Crohn's patients who'd found relief with medical cannabis. As a kid, he'd never experimented with marijuana, so he was skeptical, but he approached his doctors and got his medical card. "I was recommended a strain that had a high CBD ratio, which meant more inflammation relief," he says. "After about a week, I noticed my appetite was hugely boosted, which allowed me to keep a healthy weight, and I wasn't having nearly as much pain. That was in 2014, and I've been using it ever since; it has truly improved my life."

The internet is full of Crohn's patients telling similar tales, but that's just the tip of the canna-iceberg. Cannabis can aid in the treatment of scores of ailments, often with minimal side effects to boot.

"Having treated more than 14,000 patients with cannabinoid-based medicine, I have found it can be used to help treat a multitude of conditions," says Laszlo Mechtler, MD, a professor of neurology

Researchers found extended use of medical marijuana does not affect pain sensitivity





M

—Joel Friedman, MD

and neuro-oncology at SUNY Buffalo and medical director of the DENT Neurologic Institute and DENT Cannabis Clinic. "I have been fortunate to see the impact these therapies have had on a wide range of patients...in many cases, their quality of life improves dramatically."

"Qualifying conditions"-the ailments for which medical cannabis is allowed to be prescribed-vary widely from state to state (alas, some states have no medical marijuana programs at all), but cannabis is commonly used in treatment for Lou Gehrig's disease (ALS), cancer, chronic malignant pain, epilepsy, glaucoma, HIV/AIDS, multiple sclerosis, Parkinson's, PTSD and seizures, according to Joel Friedman, MD, the medical director for Compassionate Healthcare of Florida. "Some of the conditions we see that have the highest reported patient satisfaction are anxiety, arthritis, depression and insomnia."

Mechtler adds that he's been "particularly impressed" with results for those undergoing chemotherapy.

Elaine Burns, NMD, founder and medical director of Southwest Medical Marijuana Physicians Group in Scottsdale, Arizona, says migraines have anecdotally been a "big home run." When taken at onset, weed can help with the pain, but taking it preventively daily can drastically slash the frequency. "I've seen people with weekly migraines go down to one every few months."

The testimonials go on and on, raising the question: Is cannabis a miracle drug? Well, not exactly...

WHY IT WORKS

Even the most enthusiastic practitioners of medical marijuana are quick to point out it isn't a panacea to heal all the world's ills. And while it can be helpful in symptom relief, it's not a cure for many underlying conditions.

What does make it such an effective tool in combating a wide range of

conditions can be summed up in two words: pain and inflammation. "Marijuana contains compounds that help reduce pain, and it's an anti-inflammatory," says Burns. "It's a broad brush and can be helpful almost anywhere pain is a secondary symptom."

That's why cannabis can curb the ouch of a back injury as well as diabetic nerve pain, and why it reduces the swelling of inflammatory bowel diseases and helps calm skin breakouts.

"Patients who have arthritis and other inflammation-based pain are sometimes astonished at how good they feel from just a few inhalations or uses of cannabis," says Friedman. He's also seen how effective it can be in curbing monthly menstrual cramps and other gynecological woes. "Due to the anti-inflammation and pain-reducing qualities of marijuana's numerous cannabinoids, many women who suffer from intense cramping and pelvic pain are also quite surprised to see how much improvement can be realized with its usage."

Likewise, Burns has seen patients with endometriosis find relief. "For something like endo, I suggest using [medical marijuana] two ways–ingesting it sublingually and then treating topically as well."

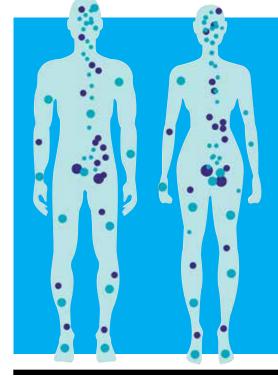
Cannabis has also been shown to reduce nausea and anxiety, which makes it particularly helpful for those undergoing harsh cancer treatments, even if it can't cure cancer-at least not yet. "I ask all of my cancer patients to tell me what their goal is," says Burns, noting there's a lot of unsubstantiated claims about cannabis' ability to knock out the Big C. Although she says she's excited about research-such as studies showing some strains may slow tumor growth-Burns says she "treads lightly" and would never claim it's a cure. "I tell my cancer patients that behind the scenes it might be helping in treatment, we don't know, but it is great for symptom relief."

DO LESS HARM

What's especially promising about medicinal weed is not only can it help with all these conditions, but it can do so with very little downside.

"Cannabis is natural, and if used appropriately [under the guidance of a well-trained and experienced health care team], it does not have many of the negative side effects associated with conventional pharmaceuticals," says Mechtler.

That's huge. Opioid-derived medications, which are the industry standard in



THE INTRIGUING IDEA OF ENDOCANNABINOID DEFICIENCY

Though research is still in the early stages, there's evidence that medicinal cannabis might be particularly effective in conditions like irritable bowel syndrome and fibromyalgia, where the medical community has struggled with both clinical definition and treatment. The reason? These elusive ailments might actually be the result of endocannabinoid deficiency. "Unbeknownst to many

people, our bodies naturally produce chemicals called endocannabinoids AEA and 2-AG," says Laszlo Mechtler, MD. "It is thought that when the levels of these chemicals become deficient, it may lead to a variety of medical conditions. In order to correct this deficiency in endocannabinoid levels, one can supplement with phytocannabinoids (plantderived cannabinoids) to reestablish homeostatic levels and in many cases treat the underlying condition(s)."



Medicinal cookies? Why not! Cannabis edibles are a fast-growing sector of the medical market.



conventional pain relief, are extremely effective at nixing the hurt, but can cause adverse effects, including respiratory depression, nausea, constipation, even death. Opioids are also highly addictive and easy to abuse, which has led to a devastating number of overdoses in the United States-currently around 50,000 deaths per year. "One of the biggest advantages is that, to date, there has not been a single death as a result of cannabis overdose," says Mechtler.

While Friedman acknowledges there will likely always be some need for pharmaceutical-grade opioids in pain management, many users are finding they can successfully make the leap to cannabis. "Some research shows marijuana can reduce narcotic usage by more than 60 percent and improve quality of life by about 45 percent," he says. "Marijuana and its cannabinoids, like CBD, can reduce the desire of opioids directly on the brain due to a relationship between cannabinoid and mu-opioid receptors."

In his clinic, Mechtler has found 40 percent of cannabis patients are able to discontinue opioid use altogether and

Cannabis is a welcomed alternative for many physicians and patients alike."

-Laszlo Mechtler, MD

the remaining 60 percent are usually able to cut back substantially.

Anecdotally, Burns estimates that in her 10 years of treating thousands of patients with cannabis, she's seen about 75 percent able to ditch opioids entirely. "For those who have been on these medications a long time, it may take a while, but it's doable," she says.

Another perk: Marijuana doesn't tend to have adverse reactions with other

cover cannabis, but many dispensaries offer discount programs and deals.

drugs the way some medications can, so it can be added seamlessly to treatment plans. (Burns stresses it's still important to provide all your doctors with a complete list of the medications you're taking).

LAG IN INFO

With so many pros and so few cons, why aren't more doctors prescribing cannabis? One of the major reasons is that conventional medicine has been slow to board the canna-train.

In Hydra's case, when he first approached his gastroenterologist about what he'd found on the Reddit forum, his GI admitted he didn't know much about medicinal weed. Luckily, the doc had a former colleague who was using marijuana to treat Crohn's patients, so he was able to point Hydra–now a grower who owns and writes for budinformer.comin the right direction. "I wish a doctor had suggested marijuana sooner," says Hydra. "Maybe then I wouldn't have had to try so many different medications."

Hydra's experience isn't unique. For a lot of mainstream medical practitioners, marijuana just isn't on the radar-and it's

actually the patients who are pushing them there. In Mechtler's case, he says he didn't get into medical cannabis by choice but by necessity. After New York State approved medical marijuana, his neurological institute-the largest freestanding outpatient neuroscience center in the country-began receiving upwards of 500 phone calls a day from patients interested in cannabis products.

"Having had very limited experience with cannabis, I was definitely a skeptic, but I realized I had to do something, given the sheer volume of calls we received," Mechtler says. So his team started a cannabis clinic-with some hesitation. "I quickly realized there was something to this, as patients I'd been treating for years were experiencing drastic improvements in their overall quality of life, discontinuing medications, and in some cases, regaining their independence."

Despite the rabid interest from patients, and the growing number of states that allow for medical marijuana, training is still lagging. As a naturopathic practitioner, Burns says her education always included cannabinoids, but for more traditional programs, that's hardly the case.

"Last I checked, less than 10 percent of U.S. medical schools addressed the topic and those that did offered a very simple and short overview at best," says Mechtler. Though he notes some countries do better, he says it's still "grossly insufficient given the increased use of cannabis products globally."

What's more, Friedman says even the training required to become a certified cannabis practitioner in the U.S. is hardly exhaustive. "The education almost solely covers legality and the recommendation practice. It would be great to teach more doctors about the benefits of medical marijuana and what conditions it can be used for."

Still, he and other practitioners are hopeful the future will bring changes, especially if patients keep up the interest and researchers keep up the work. "As stronger peer-reviewed research is released, more medical practitioners will get behind it and see that it is a safe, practical option."

Many physicians suggest sublingual delivery, which is more exact than an edible.

Medicinal cannabis is often shrouded in mistruths, many of which actually keep people from approaching their doctors. Our docs dispel the most common marijuana myths.

MEDICAL MARIJUANA PATIENTS ARE JUST **STONERS LOOKING FOR** A HIGH.

"This could not be further from the truth," says Laszlo Mechtler, MD. "Not only are most of my patients over 50, but by and large they all come in saying the same thing: 'I was talking to my friend who is using medical cannabis to treat X, Y or Z and I'm interested in trying it, but I do not want to get high.' I explain the goal of cannabis therapy is not to get high, but to find the ratio, milligram exposure and treatment method that works best for the patient, while mitigating potential side effects such as the euphoria 'high.'"

SMOKING IS THE ONLY WAY TO GET THE BENEFITS OF MEDICAL CANNABIS.

"It's important to educate patients on the various treatment forms available tincture, capsule, lotions, vape, etcetera," says Mechtler. "Most of my patients use oral tinctures, which I find to have a long therapeutic window and be the most cost-effective."



MARIJUANA MISCONCEPTIONS

MORE THC MEANS MORE EFFECTIVE TREATMENT.

"Although THC has shown numerous benefits and is an extremely useful cannabinoid of marijuana, higher THC content does not directly correlate to more significant relief," says Joel Friedman, MD. "We have begun to see that terpenes, flavonoids and lesser-known cannabinoids play a significant role in symptom relief as well."

PATIENTS WILL FEEL GREAT RELIEF **UPON INITIAL USAGE OF** MEDICAL MARIJUANA.

"All patients' physiology and how they respond to cannabis are different," says Friedman. "Even more than with traditional treatment methods, patients will need to experiment and try multiple products and consumption methods to find the maximum relief for their condition. It is important to keep striving to fine-tune an ideal medical regimen and not get frustrated if a patient's first usage does not give the benefits one intended."

Cannabis

SOME RESEARCHERS AND **CORONAVIRUS SURVIVORS** THINK THE PLANT MAY BE A KEY TREATMENT, BUT PROVING IT ISN'T AN EASY TASK. BY SHIRA LEVINE

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Sprechman started experiencing body aches, nausea, headaches, insomnia and GI pain. His symptoms began shortly after he got back from a conference in Southern California, where attendees had come from around the globe; it didn't take long for the San it easier for my body to heal." Diego-area resident to realize he'd likely caught the novel coronavirus. The lack of concrete knowledge about the virus at his sickest, Sprechman says his headthe time only made the situation worse.

and

"All the conflicting and chaotic nonstop media coverage, all this unknown, my cortisol levels spiking," says Sprechman, a leading authority in gut health dation. "Studies show stress doubles the amount of time it takes to recover from an illness-that statistic itself is stressful!"

t was mid March when Joel "I took cannabis, which I already have on hand to calm myself," he says. Worried about potentially exasperating respiratory symptoms, he nixed his vape pens and opted for sublingual tinctures, edibles and topical salves. "Cannabis put me in a state of relaxation, making

COVID-19

He also credits the plant for getting him through his worst symptoms. At aches reached a pain level of 11, but a few drops of a tincture under his tongue and a salve on his temples could take away caused heightened fear in me, which had the pain. For gut discomfort, the same combination took his pain level of six down to a three. "Using cannabis to treat and founder of the One Great Gut Foun- my COVID symptoms felt like a better idea than just suffering with them."

Since the global pandemic began in early 2020, the internet has been speck-To mitigate all that worry, he did what led with stories similar to Sprechman's. he always does when feeling anxious. But with the novel coronavirus being so,



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well, novel, information is still extremely limited. Given the antiviral and antiinflammatory qualities in cannabis, some medical practitioners and researchers suspect weed could be a valuable weapon, both as an aid to symptom relief and as a potential treatment.

"Theoretically, cannabinoids could save lives if administered in the right clinical setting," says Mohan Cooray, MD, a gastroenterologist and president and CEO of Cannalogue, a medical cannabis e-commerce firm in Canada. "But we need clinical trials to be able to demonstrate safety and efficacy first."

But getting those trials up and running isn't that easy ...

DIFFICULT TO TEST

Currently, there isn't much concrete data about cannabis and the coronavirus beyond a scattering of animal and lab scientific studies. As far as treating symptoms goes, "We know CBD is more helpful for stress and THC is most helpful for pain," says Tiffany Devitt, chief of

government and consumer affairs for CannaCraft, a California-based company with a portfolio of cannabis brands.

She adds that the cannabinoid reports of the National Academy of Sciences affirm cannabis is good for easing nausea and vomiting (although she notes the research focused on chemotherapyrelated nausea and vomiting).

In the U.S., where marijuana is still classified as a Schedule 1 substance-the most strictly regulated-any cannabis research is extremely difficult. Large U.S. pharmaceutical companies aren't currently looking at medical cannabis as a priority to diversify research on COVID-19, which means there's not much pressure to lift research bans. "This is an example of the tragic failure of U.S. drug policy," says Devitt. "The fact that we don't have answers, or that the answers to the question of how might cannabinoids help or hurt are enormously difficult to get-that's a travesty." In Canada, Cooray says he and his

Cannalogue colleagues were the first

in the world to discover and report the mechanism of action of cannabinoids in a COVID-19 infection. "The potential exists to have a substantial impact on mortality worldwide," he says, noting the research is still speculative. "Given the overall benign nature of cannabinoids and their well-demonstrated track record of safety, if taken through an oral route and dosed appropriately by medical professionals, the harm appears to be minimal. The unknown benefits have vet to be quantified."

Though both medical and adult-use cannabis are legal in Canada, the vast majority of the country's cannabis license holders don't meet the Health Canada requirements to conduct clinical trials on humans. The holdup is the lack of clinical toxicology data on the study medications, according to Cooray. That means to get clinical trials going, there needs to be strong advocacy efforts.

"Cannalogue has provided a solution to Health Canada and hopefully they permit us to conduct clinical trials in humans,"

A SHIFT IN INTAKE

While the global COVID-19 pandemic proved a death stroke for retailers from Stein Mart discount stores to Diane von Furstenberg's high-end boutiques, the cannabis biz has actually seen a major uptick in revenues. Marijuana Business Journal even estimates that 2020 sales of marijuana will be up more than 40 percent compared to the year before. But the way people consume their cannabis is also changing, according to CannaCraft's Tiffany Devitt. "In March, when people were rushing to

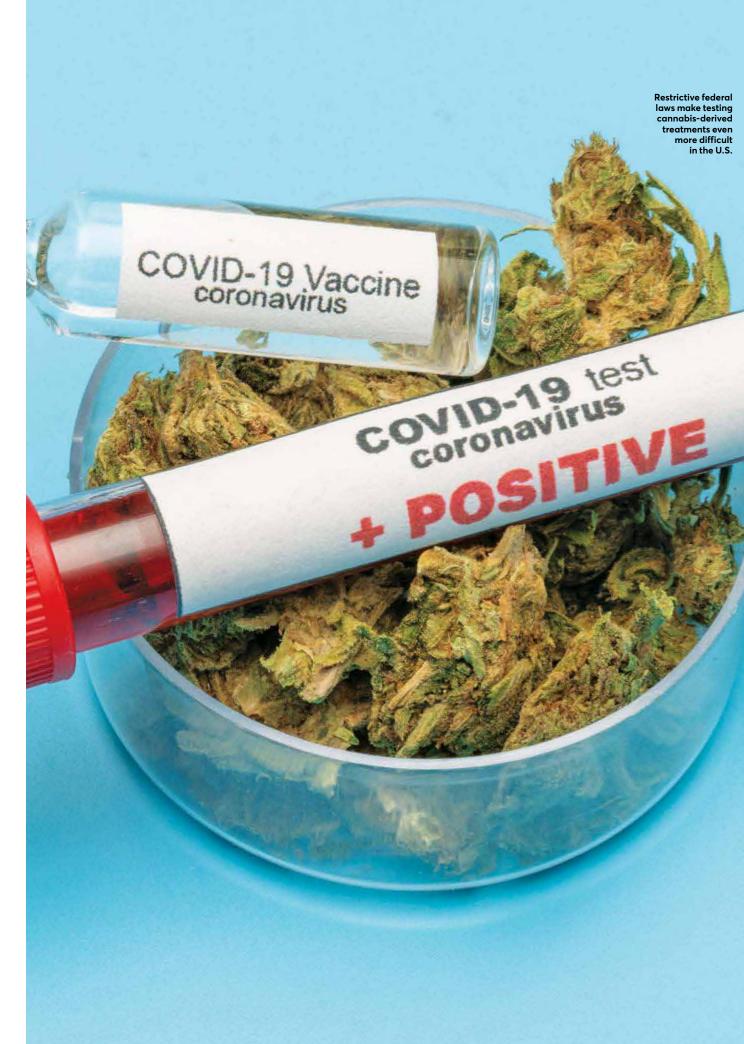
shelter in place, there was a big uptick in sales. There was a lot of panic buying," she says. "We are seeing a big increase in edibles, and at the very least, a temporary movement away from inhalables." With the coronavirus affecting

> 40% Percentage increase in sales revenue from cannabis in 2020 compared to 2019.



Cannabis consumers are eating up edibles in the

age of COVID!



Restrictive federal laws make testing cannabis-derived treatments even more difficult in the U.S. says Cooray. "We have exponential medical research potential at Cannalogue and it would be a shame if we were not permitted the ability to advance the medical applications of cannabinoids for the greater benefit of humanity, particularly during this global crisis."

OUTSIDE THE CANNA-BOX

Things are moving at a more rapid clip for Igal Louria-Hayon, PhD, the scientific director of Medical Cannabis Research and Innovation Center at Rambam Health Care Campus in Haifa, Israel, which has taken the global lead connecting cannabis to COVID-19 treatment.

"This time of crisis requires unconventional treatments and creative minds; it is our task to encourage thinking outside the box," says Louria-Hayon.

Most serious COVID-19 symptoms are related to a hyperinflammatory phenomenon or a "cytokine storm," he explains. This is an overreaction of the immune system response and can lead to multiple organ failure—and death. With its known anti-inflammatory properties, cannabis offers intriguing possibilities.

"At the outbreak of the COVID-19 pandemic, we directed our efforts and experience to study the capacity of cannabis to battle COVID-19-related inflammation and cytokine storm," he says. "During our studies we detected signs that cannabinoids contribute to the sophisticated fabric network of intercellular communication in the immune system. However, what makes our study even more complicated is the fact that each cannabis strain has hundreds of active substances."

His lab divided the clinical experiments into a two-step approach. First, immune cells from the blood of COVID-19 patients are isolated and treated with cannabinoids. The team explores which cannabis strains and cannabinoids affect the inflammation properties of the patient's cells. Based on results of this experiment, they then progress to the second one. There, the team treats COVID-19 patients with the candidate strains that presented an anti-inflammatory potential on human-derived cells from the first experiment. "Following this route, Physicians treating COVID-19 patients, who already found that conventional treatments are not clearly at hand, will turn to examine alternative care."

—Igal Louria-Hayon, PhD



we hope to be more accurate in the antiinflammatory capability of the cannabis strain we will administer to the patients," says Louria-Hayon.

A Corona BioBank was established at Rambam to keep blood samples from COVID-19 patients so that immune cells can be isolated on demand. "The samples for our first experiment are already available, and we can start immediately after we receive a Helsinki permission to work with humans," says Louria-Hayon.

SUCCESS FOR SOME

It will be quite a while before researchers like Louria-Hayon and Cooray can say definitively that cannabis is an effective treatment for COVID-19. But photographer and ayurvedic practitioner Jenny Schulder Brant says she has already experienced that firsthand.

The Lancaster, Pennsylvania, resident was sick with COVID-19 symptoms for a little over a week in April, when her husband had an enlightening conversation. "A second-generation cannabis farmer my husband knows was talking on the phone with him and he mentioned I was sick," says Brant. "[The farmer] recommended THCA because it's being seen more and more for its anti-inflammatory qualities."

The day before, to help manage her fever, cough and pain, Brant had started taking St. John's wort, which also has anti-inflammatory properties, as well as a Chinese immunity boost. "I added cannabis on Day Four, the THCA," says Brant. "I took it for three days, two times a day– about a quarter to a half of a tincture dropper. In the end, I feel like it was the THC that expedited my feeling better."

That information is something others who tested positive certainly would have liked to have known.

Brooklyn, New York, resident Fernando Senor and his wife were hit hard with COVID in March. Per their doctor's recommendation, they took hydroxychloroquine and Azithro to gain better control of their symptoms, including five days of high fevers. "Nobody ever told me anything about these theories [about cannabis]," he says. "When I was sick, I would have liked to have had that knowledge so I could have had the option to consider the potential benefits. It never occurred to me."

With laws concerning medical cannabis varying greatly from state to state, it's unclear if Senor–whose state allows for medical but not adult-use cannabis– and others like him would have even had access to weed for potential treatment.

"I am just grateful to be living in California, where this is legal," says Sprechman. "I have a lot of sympathy for people who live in states where it's not allowed. For the politicians pushing against it, it is like a crime against humanity to ignore the science and the actual experiential testimonies."



Researchers have found that cannabis could help combat some of COVID-19's more serious respiratory complications.

This Is Your Brain on CBD

WHILE THE MEDICAL COMMUNITY HAS BEEN SLOW TO CATCH ON, MILLIONS ARE FINDING MENTAL HEALTH HELP VIA CANNABIDIOL.

BY JORDANA WHITE

rolled around, Justin Young felt like he was going into hibernation. "I had problems sleeping, my energy was low and my mood changed. It could be very subtle, until it was not," he says.

For years, he simply shrugged it off as a reoccurring case of the "winter blues," until he finally did some research and found his symptoms closely matched seasonal affective disorder (SAD). "I talked to my doctor, who suggested things like light therapy, talk therapy, exercise and working to be more social. But I was already maxed out on the exercise front, training five to six days a

very year when Thanksgiving week, so that wasn't going to do it. And rolled around, Justin Young felt like he was going into hiber-just became a new toy for the kids."

Young wasn't particularly keen on prescription depression treatments, but he'd had a good experience with CBD in treating a sports injury in the past, so he decided to give it a try–and the results were amazing. So amazing, it was one of the reasons he and wife Daniela founded their own cannabidiol company, 12 Twenty CBD.

talked to my doctor, who suggested"I found CBD relaxed me and helpedthings like light therapy, talk therapyme get sleep, so I didn't wake up feelingexercise and working to be more social.groggy," he says. "Now, I start my day atBut I was already maxed out on the exercise front, training five to six days a6 a.m., get a quick dose of light box ther-

A 2015 study found CBD was effective for a number of anxiety conditions. I no longer experience the energy-zap symptoms that I lived with for so long."

Young isn't alone. While CBD is thought to be helpful for a host of conditions from pain to acne, a recent nationwide Gallup poll found an estimated 42 percent of cannabidiol users take CBD to address mental health conditions, including anxiety, insomnia, stress, depression and post-traumatic stress disorder (PTSD).

Unlike traditional psychiatric medications, which can occasionally leave users feeling flat and dealing with unwanted side effects or dependency, cannabis use offers plenty of benefits with limited downsides, according to Lynn Parodneck, MD, a former OB/GYN who now cares for medical-marijuana patients in Westchester, New York.

Yet despite budding research and scores of testimonials similar to Young's, CBD isn't widely embraced by medical professionals as a mental health treatment. "In the psychiatric community, [using cannabis] still has the stigma of self-medicating," says Parodneck.

12

Justin Young started 12 Twenty CBD in 2019 after experiencing the plant's healing pov

While CBD may officially be relegated to the psychiatric sidelines, Parodneck believes things are starting to change. "Many psychiatrists refer patients to me," she says, "for everything from anxiety and depression to PTSD, and even bipolar or autism spectrum disorders." And, she says, adding cannabis to their routines is making a positive difference.

NOTHING TO BE ANXIOUS ABOUT

Of all CBD users, 21 percent say they use the extract to help with anxiety symptoms. While research on this potential CBD benefit is early, both clinical and anecdotal reports are promising.

Anxiety comes in different forms, but studies show CBD can help address symptoms of everything from generalized anxiety to specific conditions including SAD (like Young experienced), social anxiety and anxiety-induced insomnia. Evidence also suggests taking CBD can reduce both behavioral symptoms and the physiological side effects, such as a racing heart or shortness of breath.

So just how does it work? CBD interacts with your endocannabinoid system (ECS), a series of internal receptors in your body that help you maintain balance, or homeostasis, in systems that control everything from your mood to your sleep cycles and even your immune system. If any one system in your body loses balance, you may experience anxiety.

I rely on CBD to alleviate my anxiety and to help my body get into a restful sleep at night."

-Justin Young

91% Percentage of patients in a 2019 study who saw a decrease in PTSD symptoms when taking oral CBD in conjunction with traditional treatments such as talk therapy

On its own, your body should then release endocannabinoids to restore homeostasis. But sometimes your ECS needs a little boost, and that's where cannabinoids like CBD can come in handy, helping the sluggish system get back to work.

and medication.

"It all comes down to getting your endocannabinoid system back in order," explains Parodneck. As you introduce external cannabinoids, it may be easier to achieve internal balance, reducing your anxiety symptoms.

CBD also appears to help your body hold on to serotonin-a "good mood" hormone-for longer periods, meaning it may function similarly to selective serotonin reuptake inhibitors (SSRIs), a class of medication commonly prescribed for depression and anxiety disorders.

In fact, says Parodneck, using CBD may help you break free of serious

medications, such as Cymbalta, "which are really easy to get on but notoriously hard to come off."

In many cases, Parodneck also prefers CBD to traditional anxiety meds because of the inherent flexibility. "Patients can be involved in making dosing decisions," she says. "It's not just, 'Here's 28 tablets, and we'll see you in a month." This helps patients learn the intricacies of their own bodies, and allows them to dose as needed, instead of sticking to a forced, external routine. This is especially important with intermittent conditions, like PTSD, where symptoms come on suddenly but don't necessarily require constant medication to be kept under control.

A POWERFUL TOOL AGAINST PTSD

CBD appears to be particularly effective with PTSD, a condition Parodneck says **Researchers** are just

is often overlooked or dismissed in the medical community outside of mental health professionals. "PTSD is often thought of as a military issue," she explains, but "domestic violence, sexual abuse or any kind of trauma can leave an individual with PTSD."

For Jonathan Flink, PTSD came from a stressful career as an emergency medicine technician in New York. "I've seen some terrible things while working," he says. "I've done CPR countless times on adults as well as children.... I've dealt with amputated limbs, as well as heart attacks and strokes, shootings, stabbings, hangings, suicides and other emergencies that require split-second decisions to save lives. I wish I could forget the things I have seen sometimes-and over time, the bad calls started to affect me."

Flink says that he found himself becoming moody and he began turning to



starting to explore **CBD's applications** in calming anxiety. alcohol, drinking heavily to keep "badcall flashbacks" out of his mind.

Eventually he found a psychiatrist and was diagnosed with PTSD. "I started with therapy sessions immediately, but it wasn't enough," says Flink. "I was crying every single day, having flashbacks. I was hyperalert and I felt uncomfortable around people.... I was simply existing anxiously, just waiting for the next flashback."

Flink did some research and discovered marijuana-derived CBD could help his symptoms. (CBD is present in all cannabis plants, but to be considered hemp-extracted CBD, plants must start with THC concentrations below 0.3 percent. A higher THC concentration will earn the plant a marijuana classification. Both forms of CBD are legal in states like New York, where medical marijuana is allowed, but only hemp-derived CBD can be purchased without a doctor certifying you for a medical card.)

KEY TO REENTERING SOCIETY

Fortunately, Flink's psychiatrist understood his needs, and helped him secure a medical marijuana prescription. Two years later, Flink says, "It has helped me get a grasp on my flashbacks. It calms my body and it helps calm my thoughts when I'm panicking. It takes those million thoughts racing through my head and allows me to think of one thing at a time."

Parodneck confirms the clinical truth of Flink's personal experience. "CBD is great for anxiety, depression and PTSD. It's really great for most mental health challenges, except for schizophrenia, where cannabis doesn't match."

For those looking to explore the mental health benefits of CBD, Parodneck recommends doing your research. "The more you figure out how to [use CBD] for your body, the better it will work. You can't overdose," she explains, "since you'd have to smoke 20,000 joints in 20 minutes to do so."

Though there's more work to be done, Parodneck sees this as the bright way forward for people with mental health challenges, claiming "using THC and CBD can offer you a way to reenter your life."

WEED & WELLNESS

Canna-Fact Canna-Fiction

PEOPLE HAVE BEEN USING CANNABIS FOR HEALING AND RECREATION FOR CENTURIES...AND SOME OF THESE MYTHS HAVE BEEN AROUND ALMOST AS LONG. LET'S WEED THROUGH THESE MARIJUANA MISCONCEPTIONS.

BY SHAR

OLDHA

Marijuana is extremely addictive. **FICTION...** and a little fact.

Addiction is sort of a sticky wicket. Up until a few decades ago, it was only thought of in physiological terms, meaning that if an addicted person quit a substance cold turkey, they'd experience severe, sometimes life-threatening, withdrawal symptoms. That holds true for oodles of prescription and illegal drugs-not to mention alcohol-but for Mary Jane, not so much. Quitting after prolonged use may lead to some annoying effects like irritability and sleeplessness, but they won't kill you. "Marijuana is...not physiologically addictive," says Laura Krebs-Holm, MS, RD, LD, a registered nutritionist and dietitian in Austin, Texas, and medical adviser for eMedi-Health. "[The] body does not crave weed if you have not done it in a while."

More contemporary thinking on dependence, however, has changed the game, and even the name. "Substance abuse disorder" generally means a person continues to compulsively use a substance despite negative consequences. By that metric, cannabis can be a problem for some. According to the National Institute on Drug Abuse (NIDA),



around 30 percent of regular cannabis users have some type of "marijuana abuse disorder," Ruben Baler, PhD, a scientist at the NIDA, has said. "The risk goes up if you use it frequently." It also increases if users start early, especially when they're still teenagers.

Worried weed will pack on the pounds? Evidence suggests otherwise.

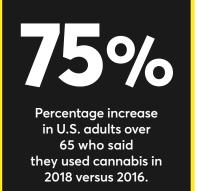


Cannabis causes weight gain.

FICTION Maybe it started when Harold and Kumar headed out on their ill-fated trip to White Castle, but many people fear weed use leads to the munchies and weight gain. That's just not the case. Some strains of marijuana do stimulate a hunger response and have been helpful in treating HIV and cancer patients who have no appetite, according to Krebs-Holm. But there have been no findings linking cannabis use to packing on the pounds.

"In one study, 3,600 persons, including marijuana users and nonusers, were followed for a period of 15 years," she says. "Marijuana users ended up eating about 600 calories per day more than nonusers, but did not increase their body mass index [BMI]." A similar study of 10,000 adults found that the BMI of marijuana users was actually lower than that of nonusers, despite the users eating more calories. "Not only do these studies challenge the notion of marijuana causing weight gain, but on the contrary, medical marijuana has been found to be helpful with 'weight loss' in overweight or obese people," says Krebs-Holm.





Using cannabis makes some people paranoid. **FACT**...but it doesn't have to.

Anyone who's ever gotten high and found themselves freaking out over government persecution, the idea we might be a simulation, or, you know, toothpaste, can attest to the fact that paranoia from a bad trip can be very real. But that doesn't mean cannabis is forever a no-go.

"Cannabis, when properly dosed, does an amazing job in decreasing anxiety for a lot of people," says Robert Flannery, PhD, founder and CEO of Dr. Robb Farms. "THC, when given in small doses, has strong anti-anxiety properties, but that will shift toward anxiety induction if too much is consumed."

Flannery stresses results vary significantly from person to person. For some, just a tiny bit of THC is too much, while others can take boatloads and remain cool like Fonzie. It also depends greatly on what kind of cannabis is consumed.

"Some cultivars of cannabis tend to provide a more relaxing, medicated state than others," he says, adding most people associate the calm with indica plants, while sativa is considered more anxiety-inducing. If paranoia is a concern, bring it up at your dispensary so they can steer you toward a mellower strain. And avoid edibles, where the digestive tract can affect the experience.

Alternatively, skip the THC (and its associated high) altogether and still reap some canna-benefits using cannabidiol alone. "CBD is a very powerful antianxiety cannabinoid," says Flannery. In fact, CBD can even counteract the anxiety of too much THC. "You can use CBD after the fact to reduce anxious feelings.... It can decrease overall anxiety and promote a general feeling of well-being."

Marijuana use kills ambition.

FICTION...most of the time Stoner stereotypes like The Dude and Jeff Spicoli might be fun, but that simply isn't the reality for most recreational- and medicinal-cannabis users. For those who suffer from some form of marijuana use disorder, though, things can take a turn.

"Consuming weed habitually for a prolonged period of time can cause serious lack of motivation, hallucination,



erectile dysfunction, bloodshot eyes, chronic cough, etc.," says Krebs-Holm. "Marijuana high in CBD calms your body down, while helping you with anxiety and panic attacks and also inducing a state of happiness. But when your happiness becomes dependent on an external substance, it is always a wrong situation to be in."

You can't die of narijuana overdose.

FACT... for now. People have died from too much salt, too much caffeine–even too much water–but to date, there has never been a recorded death from marijuana toxicity alone.

"Studies render it almost impossible to actually die solely from marijuana overdose," says Krebs-Holm. "A user would have to ingest between 20,000 and 40,000 times the amount of THC that is found in a single marijuana joint to approach a lethal dose–theoretically, a person would have to consume about 1,500 pounds of marijuana within 15 minutes to evoke lethal consequences." (We really don't recommend trying this.)

That said, just because no one has died doesn't mean it's impossible

to overdose on the herb. "If large quantities are taken or if the user is a novice not accustomed to the effects of marijuana, there can be some unpleasant side effects, like panic, paranoia, acute psychosis, nausea and shortness of breath," explains Krebs-Holm. "But these negative effects usually subside automatically without requiring any medical care."

Weed isn't as strong as it used to be.

FICTION Plenty of older cannabis connoisseurs will tell you that, back in their day, pot was more potent. They might remember it that way...but, well, they're just wrong.

"With the expansion of medical marijuana around the country, dispensary products of a much-higher THC content have become available than were present in the past," says Joel Friedman, MD, medical director of Compassionate Healthcare of Florida.

"People who are good at plant biology have gotten into cannabis and selectively bred plants to be higher in THC, but that doesn't necessarily mean everyone is getting higher than their parents did in the '60s," Ryan Vandrey, PhD, associate professor at Johns Hopkins University, told the website The Greatist. "Potency does not equal dose." Contemporary cannabis consumers are possibly using less than previous pot users to get the same result.

Still, many unfamiliar users might be reaching for products with the highest THC options, assuming those are better. It's always best to use the products with the lowest concentration of THC that still get the job done.



Natural doesn't always mean better, but in the case of cannabis, natural is the only way to go.

Synthetic cannabinoids are the same as organic marijuana.

FICTION K2, Spice, Spike–whatever you call it, synthetic cannabinoids are not at all the same as natural weed. Originally created in a lab to study the effect of cannabis, the current stuff on the street is likely to contain toxic substances like nail polish remover.

While synthetic cannabinoids bind to the same receptors as organic weed, the synthetic stuff is downright "dangerous," according to the Centers for Disease Control and Prevention: "Research shows that synthetic cannabinoids affect the brain much more powerfully than marijuana, creating unpredictable and, in some cases, life-threatening effects including nausea, anxiety, paranoia, brain swelling, seizures, hallucinations, aggression, heart palpitations and chest pain." Yeah, here's a case where you can definitely just say "No!"



Finding a practitioner , you trust is an important step.



Talk to Your DOC

WHILE MOST STATES CURRENTLY HAVE MEDICAL-MARIJUANA PROGRAMS, GETTING YOUR MEDS ISN'T ALWAYS AN EASY PROCESS. **BY SHEENA FOSTER**

or some patients, obtaining a medical-marijuana card (MMC) can be as elusive as finding a Black African Magic strain. While 48 states now have some medical cannabis program available, the legality of weed varies confusingly from state to state. Many doctors don't know how to prescribe pot–or they simply don't want to-leaving patients feeling disenfranchised. And if you're lucky enough to score an MMC, there's also the issue of affordability. It's a perfect storm that pushes many to the black market. But there is help, like the pro-pot organization Americans for Safe Access (ASA). ASA's director, Debbie Churgai,

answers your most burning questions about the purple haze maze.

Where does an MMC-seeking patient even begin? Doctors are the key to opening this medicine up. We encourage every patient to talk to their doctor, even if you think he or she will say no, because we want doctors to know that patients are asking about this. I believe doctors are afraid. Patients have to be truthful. Like, "Look, I really want to take this, and if you don't allow me to, I'm going to go to another doctor." There's a letter patients can download from our website [visit safeaccessnow.org/docletter] and

give to their doctor. If he or she says, "I know nothing about it," the letter will inform them about our continuing medical education courses on medical cannabis, called Cannabis Care Certification-and give them a discount code and a link to the class.

Why is it so hard to find a doctor 😏 to recommend marijuana if you have a qualifying condition?

Doctors were never taught about medical marijuana in school. It's new to them, and they don't feel comfortable recommending something for their patients if they don't fully understand it. But what I always say is, read

A PRICEY PRESCRIPTION

Cha-ching! Getting a medical marijuana card (MMC) can be expensive, ranging from \$50 to as much as \$350 in some states. "The newer the medical marijuana program, the more expensive it's going to be," warns Rachna Patel, MD, chief medical officer of Doc Patel's CBD. "And then, over time, because there's more and more competition. it gets cheaper and cheaper."

Getting an MMC isn't always a one-and-done prospect, either. "In some states, the card is good for only a few months, while in others it can last two to three years," says Debbie Churgai, director of Americans for Safe Access. "Some states offer other cost incentives. In Illinois, for example, you can turn in a prescription for opioids and receive a free MMC. You still have to pay for the medicine, but the card fee is waived. In New York, some insurance companies will pay for the doctor appointment to get an MMC recommendation."

And that's all before paying for the product. Because of marijuana's federal classification as a Schedule 1 substance, insurance companies won't cover marijuana, even if your doc recommends it. Though many states have no or low taxes on medicinal weed, it can still be costly, so it's definitely worth it to shop around and pay attention to sales and promotions—and of course to keep lobbying your legislators to change federal laws!



about it. You're never too old. This is happening. Doctors need to look at the research, look at the studies, learn about it, and then they'll feel more comfortable talking about it with their patients and allowing their patients to try it.

Without a doctor's approval, Q do you find patients end up self-medicating with cannabis purchased for adult use at a dispensary or on the black market?

Yes. Patients don't know how much to take, what kinds of medicine to take, or what method of administering it, meaning oil versus vaping versus smoking. On our website, we have a ton of free information for patients, including guides to medical cannabis and CBD, explainers on how cannabis works, what to look for on a label, the different ways to administer, and the different forms of medicines.

Even with an MMC, C the dispensary can still be intimidating. What's the best way to avoid cannabis confusion?

We always say patients should go to A dispensary a little bit educated. I

tell patients that every study is different, and cannabis works differently in every person, so what works for one personwho is your size and gender, and has your same condition-might not work for you. If you try something, start low [dose]. Start maybe with a one-to-one ratio of CBD and THC. Start with very low milligrams, maybe 5 milligrams, and see how that makes you feel. We also encourage patients to journal about what medicine you're taking, what's in it, where you got it and how it makes you feel. For many patients, the first medicine might not help, but that doesn't mean that nothing's going to help you. It just means you need to find a different formulation or a higher dosage or a different administration method. Edibles are great for patients that don't need that immediate relief.

What are the dangers of Q buying cannabis products on the black market?

The black-market patients need to understand that medicine in every dispensary has been tested. You cannot guarantee what's in medicine from the black market. A lot of people

are still doing that because it's easier, it's cheaper. They don't have to get a doctor's recommendation. They don't have to go through the state system and get a medical cannabis card. They don't have to pay for all that. However, they're putting their health and lives at risk because we don't know what is in the medicine you get from the black market. I know patients who are allergic to certain terpenes. They might take something and have a very bad reaction. Then they'll think, "Oh, well, I can't take cannabis," but that's not true. They might just be having an allergic reaction to a specific terpene. It's really important to know what's in your medicine if you're a patient.

By registering as a medicalmarijuana patient, you're putting your name on a government list. Is there a possible downside to that?

There can be, depending on what legal protections the state administering the medical-cannabis program has put in place. Several states have not organized comprehensive legal protections for patients, which [technically] leaves patients vulnerable to fines and jail time for simply participating in a staterun health program [because federally, marijuana is still classified as a Schedule 1 drug]. Also, states that don't impose specific restrictions on what information can be shared with other state departments and agencies or the federal government put patients at risk of surrendering a number of civil rights outlined in state laws and the U.S. Constitution. Critical protections include protections related to employment, driving, family law, child custody and housing.

What is the most liberal state in medical marijuana, and what is the strictest? Oregon received the highest grade in our 2020 State of the States report. Oregon allows you to get anything your doctor deems necessary. There are now just two states in the country-Idaho and Nebraska-that don't allow



any cannabis. So, 48 states allow some form of medical cannabis, but 12 states only allow CBD. Overall, there are only 34 states that we say have a lowcost medical-cannabis system. Some of those states allow very low levels of THC. Some states have restrictive lists of conditions you need to have to get cannabis. All CBD-only states received low grades from ASA because we know that CBD alone doesn't help everyone.

If someone cannot get an MMC in their state, then what? They have to advocate for it. We're here, first and foremost, for advocacy. We're a nonprofit, so we're helping to push for legislation-not just for states that don't have it, but also in states with programs. We want them to do better with patients and regulations. The states that don't have it need to start by educating the legislators.

GO-TO RESOURCES

These sites can help you weed through the confusion of medical weed.

safeaccessnow.org Americans for Safe Access helps with accessing medical cannabis and advocacy.

medicaljane.com has a business directory and shares how-to's about use.

healer.com Dustin Sulak, MD's website takes the auesswork out of how much cannabis to take.

projectcbd.com Catch up on the latest research on CBD, THC and more.

leafly.com Dubbed the world's largest cannabis information resource and technology company, Leafly shares dispensary reviews and locations, and helps you find the nearest medical marijuana doctor.

The HighLife

CANNABIS IS MORE THAN A PLANT; IT'S A LIFESTYLE! READ AN EXCLUSIVE INTERVIEW WITH LEGENDARY ACTOR TURNED POT FARMER JIM BELUSHI. FIND OUT HOW SOME FORMER FELONS ARE NOW MAKING MONEY LEGALLY IN THE CANNA-BIZ. LEARN HOW THE HERB CAN HELP TOP ATHLETES AND WEEKEND WARRIORS REACH PEAK PERFORMANCE. PLUS, GET THE SCOOP ON CBD PRODUCTS FOR YOUR FURRY FRIENDS.



Canabis According to

IN AN EXCLUSIVE INTERVIEW, ACTOR JIM BELUSHI DESCRIBES HOW HE'S A MAN ON A MISSION TO BRING COMFORT AND HEALING TO THE WORLD THROUGH POT. BY AMY L. HOGAN Belushi says working closely alongside his team of growers at the farm has "changed" him as a man.

dilapidated, 1974 black-and-white Dodge cop car roars in front of the Greenhouse Dispensary in Chicago's Skokie suburb Sept. 3, and the socially distanced crowd goes wild. The vintage vehicle was first made famous in the 1980 flick Blues Brothers, which starred John Belushi and Dan Aykroyd as the titular sunglasses-wearing kings of cool. Forty years later, it's John's brother, legendary actor turned cannabis farmer Jim Belushi, behind the wheel, here to launch his Blues Brothers brand of premium marijuana products in the city where it all began. "Illinois is the mothership of the Blues Brothers, so it feels really good [to bring it home]," says Belushi. "People really embrace it."

Those outside the Windy City will get a chance to experience Belushi's Farm's "working man's brand" of pot products soon, too, as the company will launch in Massachusetts, Maryland, Michigan and California dispensaries, says the actor. "We are on the path to expanding the Blues Brothers so everybody can experience the music, the mischief and of course, the mission of the plant."

Running a 93-acre medical-cannabis farm in Oregon might seem quite a pivot for Belushi, an award-winning performer who's been in the spotlight since his Saturday Night Live days back in the 1970s, but his Belushi's Farm has evolved from a hobby to a national brand with a higher purpose.

"This isn't a business anymore. It's a calling," Belushi explains during an interview mere days after wildfires came within 3 miles of destroying his farm-but not his determination. "The plants I grow are just light for the body,

and what's wrong with light? Light raises your consciousness and brings your body to good health."

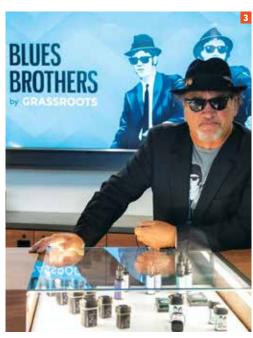
A WINDING ROAD

Belushi-whose farming adventures are chronicled in the Discovery series Growing Belushi-first discovered the majestic beauty of Oregon's Rogue Valley 12 years ago, around the time his Emmy-nominated ABC sitcom According to Jim was wrapping up. Mindful of the land's history and native inhabitants, he renovated a 13-acre riverfront property in Eagle Point for a family retreat. A few years later, he purchased the 80-acre farm directly behind his property from a dying neighbor turned friend named Becca. "She had esophageal cancer," Belushi has said. "She wanted me to take care of her husband, Charlie, and she wanted me to have the farm. So I bought the farm, and Charlie's got a life estate there."

With nearly 100 acres of "spiritual land," the K-9 star wanted to do more than host the occasional community fundraiser. Belushi debated planting corn or soy, but in 2015, Oregon legalized adultuse cannabis, which got him thinking. Belushi grew up smoking weed alongside big brother John in the Chicago suburbs in the '60s and '70s. "My high school was filled with weed," Belushi says. "It was a fun thing to do, but as I got into theater and acting, all that kind of fell away."









Belushi's Farm's dyllic barn is ated in Oreao The iconic akes a stop at he Greenho Jim Belush shows off some of the Blues Brothers products, which range in price from \$22-\$65 . The actor take great pride in overseeing his n seed to se

line of mari



I'm fighting rustic mites and aphids. I'm flushing the irrigation system. I'm clipping it; I'm hanging it, drying it. I have a little tool to measure moisture in buds. I crack the stem to check it. I can't believe I'm a farmer."

—Jim Belushi

But with all that fertile land ripe for farming cannabis, he reevaluated his relationship with weed and decided to give it a go. "There's definitely been a shift in my thinking the past [few] years when it comes to marijuana, thanks to all the discoveries that have been made about the amazing properties of this beautiful plant," he says. "This is a spiritual and medical plant that can change our communities."

Perhaps it could have even changed a personal tragedy. The actor's family forever changed in 1982, when his brother John died at 33 of a cocaine and heroin overdose. Jim believes the Animal *House* star suffered an undiagnosed brain injury playing high school football and turned to hard drugs in order to selfmedicate. "If John was a pothead, he'd still be here today," Belushi says, adding that he wishes the miraculous medical benefits of marijuana had been more widely understood during his brother's lifetime. "I really believe if we knew then what we know now about cannabis, a lot more people would be alive today, including my brother."

Now he takes solace in helping others with his cannabis crop. "A veteran with severe PTSD told me how he got off opiates with cannabis. He says my Black Diamond OG is the only strain that calms him down enough to be able to talk to his wife and kids, and it helps him get to sleep," shares Belushi, whose farm's products were first launched in Oregon dispensaries in 2019. "One gentleman who's paralyzed from the waist down has uncontrollable spasms until he uses the Diamond OG. I hear all these stories, and I know it's a beautiful plant."

NOT AFRAID TO GET DIRTY

With more and more states allowing for medical and adult-use cannabis, celebs from Snoop Dogg to Bella Thorne have been adding their names to cannabis lines. "Celebrities have a great deal to gain with endorsing or creating a brand of products," explains Roberta Tsang, co-founder of Raize Communications, which specializes in the cannabis industry. "However, just because someone it's a lot longer."



This plant is something I believe in so deeply If you can work with something that can heal people and families, why not jump on it and make it happen?" —Jim Belushi

famous launches their own line doesn't always mean it's a quality product."

For Belushi, who went to great lengths to ensure his weed is superior enough to carry on both his brother's and the iconic Blues Brothers' legacy, quality has always been priority No. 1. And what truly sets the performer apart from other stars who are also dabbling in cannabis is that Belushi is extremely hands-on from seed to sale. "When you grow it, you know it," he explains. "I'm [at the farm] about 10 days a month unless it's harvest time, in which case

Fans of Growing Belushi know Jim still has a lot to learn about cultivating the best bud. That's why he sought the advice of longtime friend Captain Jack, a grower who supplied the original SNL cast with marijuana. "Captain Jack taught me everything," Belushi says. "He has been growing since the '60s and I just keep learning."

The three-episode docuseries captures the highs and lows of seven close-knit employees at Belushi's Farm as they try to bring to market both the Blues Brothers strain and one named for Captain Jack. It wasn't always easy. Belushi nearly burned the entire crop of Captain Jack plants with a rookie mistake. And there were further mishaps when he and cousin Chris–a chain-smoking, coffee-guzzling straight man-traveled to Colombia to track down the elusive cannabis strains that Aykroyd, who's been supportive of the venture, had suggested for use in the Blues Brothers brand. Then of course, there's Belushi's innovative cultivation techniques, such as playing "baby-making music" from Marvin Gaye and Barry White to encourage the plants to grow.

Maybe it's the soul music, but something is definitely working. In addition to the Blues Brothers launch in Illinois, Belushi's Farm unveiled a Captain Jack vape pen at Portland, Oregon's Curaleaf in September. "We took 300 pounds of Captain Jack and [transformed] it into the most delicious [concentrate]," says Belushi. The new products joined their previous sun-grown, hand-harvested flower strains, including Black Diamond OG, Blue Dragon, Chocolate Hashberry

and Jim's personal favorite, Cherry Pie. Despite his success, the proud new farmer isn't ready to rest just yet. "I don't really feel like I'm in a payoff position," he says. "I'm just kind of living in the moment and it's nice to have a vision slowly find its manifestation. It's joyful."

GIVING BACK

With everything happening globally, it's not surprising the world needs weed now more than ever. According to the Oregon Liquor Control Commission, sales have been rising since the onset of the COVID-19 pandemic, with single-month sales topping the \$100 million mark for the first time in May. That doesn't surprise Belushi at all. "The medicine's calming effect is so beneficial," he says. "We're all experiencing trauma right now. Whether it's from the loss of control, the pandemic, the fear of wildfire destruction, the unrest-all of it is so disturbing. Now is a great time for cannabis."

Belushi is also using his star power to become part of the solution to industry problems. He may be best known for comedic films, but he turns serious discussing the other mission close to his heart: Last Prisoner Project. Through a combination of intervention, advocacy and awareness, this not-for-profit made up of cannabis industry leaders is dedicated to freeing and rehabilitating individualsdisproportionately poor Black and brown people-still serving time for nonviolent cannabis convictions.

"How can I sell cannabis legally, when these pioneers of the industry are in jail?" Belushi asks. "There are more than 40,000 men and women incarcerated for cannabis. This is less about the plant and more about the people that smoke it Let them out." He's also working with Oregon officials on a program providing medical cannabis to those in need, and he's been active in helping farmers hurt by the fires. Belushi plans to continue working tirelessly for the greater good of the cannabis industry, because this is where his future resides. "My journey is to stay engaged with this plant," he says. "It's what people need."

Jim Belushi's not the only canna-celeb who cares about their crop. These stars do more than just slap their name on a pot product.

WILLIE NELSON When it comes to iconic celebrity stoners, country crooner Willie Nelson ranks right up there with Cheech & Chong. He's been in jail for possession and has been preaching about cannabis' medicinal powers long before it was ever legalized. "It's nice to watch it being accepted," Nelson has said. "Knowing you were right all the time about it: that it's not a killer drug. It's a medicine." His company, Willie's Reserve, carries everything from his favorite strains of flower to the CBD-infused coffee he likes to sip at home on his Texas ranch.

MELISSA ETHERIDGE Melissa Etheridge's 2004 battle with breast cancer opened her eyes to the healing powers of pot, which motivated her to create Etheridge Farms on 47 acres in California's Santa Cruz

MORE FAMOUS FARMERS

Mountains. "It's pesticide-free," she has explained of the organic cannabis grown on her farm. Knowledge is power for the Grammy-winning singer: "Plant medicine that has been here for thousands of years is something that can help the human body," she has said.

SETH ROGEN

"I smoke a lot of weed when I write," Seth Rogen, best known for starring in stoner comedies like Pineapple Express and Knocked Up, has said. The comedic actor and writer is actually quite serious, though, about growing the good stuff. He paired up with Canada's Canopy Growth to create a special strain called Houseplant sativa. "Houseplant is a passion we've brought to life through drive and dedication," Rogen has said.



Sale and a state



CBD & Sports

WITH ITS ANTI-INFLAMMATORY AND PAIN-RELIEF PROPERTIES, CANNABIDIOL CAN BE A GAME CHANGER FOR PRO ATHLETES AND WEEKEND WARRIORS ALIKE. BY DONNELL ALEXANDER n 2014, professional rugby player Anna Symonds was in California as her then-boyfriend underwent a painful bone marrow transplant. He had a medical marijuana card, and she saw firsthand the soothing role cannabis played in his treatment, which piqued her own interest.

Then he told her about cannabidiol (CBD), a nonpsychotropic compound found in pot's sister plant, hemp, that was said to have powerful anti-inflammatory and pain-relief applications. Just past her 35th birthday, Symonds was still active in the sport and on the hunt for a women's Division I championship. But after years as a tough competitor, she was dealing with a range of pain born of sustained muscle exertion. "I didn't want to give up my passions," says Symonds, now 42. "I wanted to be performing at the levels that I had. The athletes I knew were all just supercurious [about CBD] and wanted to know more." She was serious about sustaining her lifestyle; she had given up drinking and started practicing mixed martial arts. And she decided to give CBD a try.

Six years later, she still plays touch rugby for the Portland Hunters, and before each practice and workout, she takes a cannabis microdose that's equal parts CBD and THC. It's definitely been a game changer.

Symonds is hardly an outlier. The list of athletes who can't stop singing the praises of CBD reads like a virtual who's who in professional sports. Gold medal gymnast Gabby Douglas uses it for pain relief, while champion beach volleyball player Kerri Walsh Jennings says it helps her with sleep. And five-time Pro Bowl tight end Rob Gronkowski, who lent his name to a line of CBD products from CBDMEDIC, said that CBD was so "life-changing" when it came to physical



Players could be benefiting from this.... You want your athletes to win, but you also want them to be as healthy as they can possibly be."

—Anna Symonds

tsunam

empow

BOD

ANNA SYMONDS The competitive rugby player embraced CBD as part of a wellness routine. recovery, it allowed him to come out of retirement and sign with the Tampa Bay Buccaneers in 2020. Be it balms, oils or tinctures, CBD products are clearly a staple in the gym bags of top jocks.

But that doesn't necessarily mean everyone fully understands the lowdown on CBD and sports. "Now, people might have heard of CBD, but they still have a bunch of misconceptions," says Symonds, who has since made it her job to educate the CBD-unaffiliated as the director of education for the Oregon cannabis grower East Fork Cultivars.

AN EXCITING ALTERNATIVE

Whenever a patient comes in with a twisted knee or an arthritic joint, Zora DeGrandpre, NMD, a naturopathic physician and editor of the website Leafreport, says she's inclined to recommend CBD instead of more traditional pain medications that often come with serious side effects and can be highly addictive. But a CBD rec means dispelling a lot of misinformation about cannabis. Though CBD on its own isn't psychotropic, many people fear it can still "get you high," she says, adding that even the benefits of CBD are often shrouded in speculation.

"A lot of it is word of mouth, but that doesn't invalidate it by any means. I think we should make the distinction between what is known scientifically and what is known anecdotally," DeGrandpre says. "CBD has a lot of activity in reducing inflammation, and it seems to be effective in reducing pain. It seems to be beneficial in helping to normalize sleep patterns. And it also seems to be effective in balancing mood. But we don't know that."

Minimal credible research has been performed on CBD, THC, or any of the plant's 100-plus other cannabinoids (largely due to hemp's prior classification as a Schedule 1 drug and marijuana's continued status as one). Studies conducted on animals have shown reduced inflammation in subjects given CBD, and the Food and Drug Administration recently approved it for use in seizure disorders. Otherwise, CBD relies on anecdotal evidence as it awaits double-blind and placebo-controlled studies.

Those anecdotes, from pro athletes and sports dabblers alike, reveal a wide therapeutic window of how CBD can help with performance, pain relief, recovery and optimizing sleep. For those interested in CBD as a pain reliever, DeGrandpre says, "I always tell people to start low and go slow, so that they can find their particular ideal amount of CBD to take. Increase slowly until they find their sweet spot. That's a general rule for everybody when they're using CBD."

SUBLIME SUPPLEMENT

While Symonds likes her THC-CBD microdose prior to a workout, Rachael Rapinoe opts to use CBD as a daily supplement. The sister of famed U.S. Women's National Soccer Team star Megan Rapinoe, Rachael played alongside her sis on the University of Portland's soccer team, and wishes the two of them had known about CBD back then. Once Rachael discovered cannabidiol—a far cry from the often-addictive training room pain-relief remedies she'd seen she says her whole world changed.

"I was told marijuana was the gateway to bigger and worse drugs, so my mind was blown when I first started using CBD-topicals and gummies and tinctures," she says. "You're not getting high. It actually is an all-natural, much safer pain-management tool." Rachael was so impressed, she co-founded and serves as CEO of the CBD company Mendi. Beyond pain relief, Rapinoe touts the cannabinoid for sleep, "especially after a night game and you're trying to sleep but you're still sorta revved up. It actually fed my body."

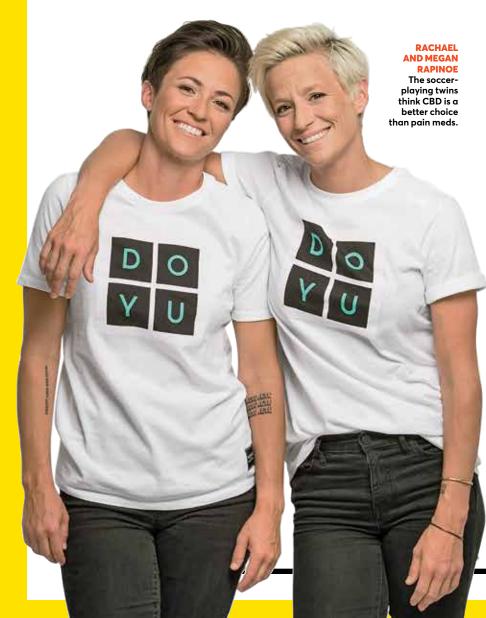
KNOW YOUR PRODUCT

Both Rapinoe and Symonds insist those new to cannabidiol actively research their options before purchase. It can be a challenge scouting what Symonds calls "a marketplace that is plagued by inferior products." The unregulated nature of hemp means buyers should look at certified lab reports, which upright companies make available online. This should tell you whether a product meets state standards for heavy metals, microbials and pesticide residues."You want a company that has enough confidence in their products that they're showing these lab reports," adds DeGrandpre.

It's also the best way to make certain that the CBD amount advertised on a product is actually what's inside. This can be a bit tricky in full-spectrum products, which are legally allowed to contain 0.3 percent THC (the psychotropic cannabinoid). This is doubly important for pro athletes or anyone regularly drug tested for marijuana. "The likelihood of it popping on a test is very small, but the fear is very real," says Rapinoe, who adds that this has unfortunately led many athletes to not even consider CBD.

Symonds has been actively taking the case for cannabis to governing sports bodies including the Women's National Rugby Team. But for now she advises: "If you're a government or state worker or under [International Olympic Committee] or [World Anti-Doping Agency] compliance– although full-spectrum is still hemp and has minimal traces–looking for a broadspectrum or CBD-only hemp product is probably going to be your better bet. But if you don't have to worry about getting tested, we absolutely recommend going full plant."

And when you find the right product, it's game on!



GABBY DOUGLAS

"I could have been more pain-free throughout my gymnastics career if CBD had been allowed," the gold medalist has said.



The football star says CBD allowed him to be "pain-free" for the first time in years.



Orange Is the New

n 1998, federal agents showed up at Dennis Hunter's garden in rural Northern California and started poking around his "suspicious-looking" flowers. Dodging arrest, Hunter fled with his family. The Feds, meanwhile, uncovered the selftaught cannabis farmer's operation: Two indoor facilities, where Hunter had been cultivating 12,000 then-illegal cannabis plants (the largest raid in United States history at the time). The Hunters lived underground for four years, until an anonymous tipster notified authorities. Hunter was arrested and held on \$1 million bail. Facing more than 20 years for felony drug offenses, he took a deal for 13 years and was sent to prison in 2002. He ultimately served six-and-a-half years.

"It's this terrible time in my life," says Hunter. "For years, I didn't want to tell people I went to prison."

These days, with the legal marijuana market booming in many states, Hunter

Green speaks openly about his past. In 2014, he partnered with Ned Fussell to start Sonoma, California-based CannaCraft, which today has a portfolio of medicinal and recreational cannabis products at more than 500 dispensaries across California. Revenues are nearly \$50 million,

and they have a staff of 140 people. While he's legally growing an empire off the very flowers that once sent him away, Hunter is well aware he's an exception. That's why he's using his position at CannaCraft to change that. The Farmer and the Felon, one of the company's brands, is committed to advocating



SOME FORMER **CANNABIS FELONS ARE NOW MAKING** MONEY IN THE LEGAL WEED BIZ-AND THEY'RE TRYING TO **HELP OTHERS. BY SHIRA LEVINE**

> for social justice for cannabis, with the motto "We are cannabis for change." And if Hunter and several other activists have their way, there will soon be more former felons making a living as legal weed entrepreneurs.

FIGHTING THE WAR ON DRUGS

Today, more than a third of Americans (and growing each election cycle) live in states where adult-use cannabis is legal, and many more reside in areas where low-level cannabis crimes such as possession have been largely decriminalized. So Hunter says people

CannaCraft **Ned Fussell and** Dennis Hunter are heavily lved in the Last Prisoner Proiect.

are often shocked to discover nearly 16 million people in the U.S. have been arrested for cannabis violations in the past decade alone. With outdated laws like three strikes and mandatory minimums, prisons (many of which in the U.S. are for-profit) are chock-full of nonviolent cannabis offenders-40,000! Even more staggering, the U.S. currently spends a whopping \$47 billion per year to continue the war on drugs.

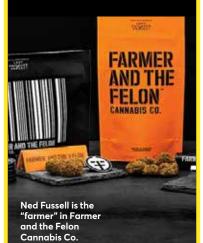
People of color are disproportionately casualties of these policies. Recent data from Human Rights Watch found nearly 63 percent of all people jailed for drug offenses were Black, despite having rates of consumption nearly identical to whites.

Although Hunter carried the stigma of his status as a felon, he knew he had to speak out: "I'm out and seeing that there are still people in prison. So bringing that awareness of where I came from, that there are still people in prison-that became bigger than the stigma [of prison time]."

Hunter, along with celebrity pot purveyors, including Melissa Etheridge, Willie Nelson and Bob Marley's sons Damian and Stephen, is on the board of the Last



Annual revenue of CannaCraft, co-founded by former felon Dennis Hunter.



Prisoner Project-an industry organization working toward restorative justice for those jailed for cannabis crimes. The group has spawned many partnerships, including one in May 2020 with Green Peak Innovations to launch the Two Joints Brand, which will fund criminal justice reform efforts.

It's always

been about

trying to tear

down the

stigma around

cannabis.

-Dennis Hunter

"Expunging cannabis records is just a start," says Hunter. "It's difficult for people to get jobs when they have that felony on their record," which can be a red flag when a potential employer finds it during a background check.

To that end, the project aims to get those whose lives have been harmed by overly punitive cannabis laws back to work in the ganja field. Damian Marley recently purchased a \$4.1 million, 77,000-square-foot former prison in Coalinga, California, and in a partnership with Ocean Grown Extracts, it's been converted into a marijuana farm where they hope to create at least 100 new jobs.

A TOUGH ROAD

But it's not an easy task. State laws vary but are largely stacked against those with criminal records. For example,

left-leaning Colorado, the first state to legalize adult use (in 2012), has rules restricting those with felonies on their records from participating in the cannabis industry for a decade. "That took a lot of African Americans and Hispanics out," Sarah Woodson, founder of the nonprofit The Color of Cannabis, told Boulder Weekly. "Those are the people who statistically have cannabis convictions."

While more than half of the people incarcerated for marijuana distribution are Black, they certainly aren't the ones getting rich now that cannabis is being legalized. As of 2020, 87 percent of cannabis businesses in the U.S. are owned by whites, 5.7 percent are Latino-owned and only 4.3 percent are Black-owned, according to Boulder Weekly.

In LA, Virgil Grant-who co-founded the California Minority Alliance, a nonprofit promoting inclusion in the cannabis industry-is working to change that. Like Hunter, his motivation is born from his own nightmare with the criminal justice system.

After operating in the black market during pot prohibition, Grant opened his first licensed medical cannabis shops in LA in 2004. He trademarked his own marijuana brand, California Cannabis, which sold vapes, tinctures and clothing. But despite living in progressive California, he often found himself caught up in the murkiness of federal and state laws. He was raided by DEA agents three times and was eventually indicted on multiple counts of drug conspiracy, money laundering and operating drug-related premises within 1,000 feet of a school. His six dispensaries were shuttered, and in 2010, he was sentenced to six years in federal prison. Grant strongly believes his conviction is an example of racial injustice. "I was Black and owned six locations," he told The Guardian. "I was heavily targeted in the war on drugs."

Despite ongoing obstacles, Grant has been steadily working his way back into the canna-biz since his release in 2014. He has also become an outspoken voice for change. His agenda today is to help people with nonviolent cannabis records get them expunged and create legit



Look at me, a father of six. I was married and when I was taken and put away for six years in prison, I wasn't the only one who was negatively impacted."

-Virgil Grant

businesses from the same product that still delegitimizes them in some circles. "When something is legal, as cannabis is now in the state of California, how does someone *still* have a cannabis felony or misdemeanor on their record at this time?" Grant has wondered.

In July 2020, LA did change laws incorporating some of his ideas, though Grant says they were "watered down."

Hunter says the focus needs to widen to help more than just a handful of individuals. "Right now, most of the equity programs I see are for licensing," he states. "Mostly retail-dispensary licenses. Those are where they limit so the equity applicants can get licenses." The problem, says Hunter, is that "some of those programs just benefit one person rather than the community. We need to do more about spreading the programs out to where there is a broader reach."

One of the key ways he wants to make that happen is by changing the way the industry is taxed and regulated. Essentially, says Hunter, the politicians are making it so difficult to regulate cannabis that the above-board businesses can't compete with the illegal market, especially smaller businesses that don't have economies of scale.

"You're losing the industry because you're making it so expensive and so much easier and cheaper for somebody to go get cannabis in the illicit market," he says. "I see them kind of choking the industry off. If they don't agree with it, they just tax it harder, almost to try to tax it out of existence. [In some states taxes on recreational weed are more than 40 percent.] But what they really do is just push it out of the regulated market."

It doesn't slip past activists that state governments collected \$1.2 billion in cannabis taxes in 2018, and that same year 663,367 people were arrested for marijuana violations, 608,775 of which were for possession, per Drug Policy Alliance.

For Hunter, one of the greatest transformations he's witnessed is the changing of hearts and minds about the industry from reaching out to his community. "We do that so they can see we're just another normal business," he says. "And that we care about our community, too."

Cannabis

for

PET OWNERS CLAIM **CBD CAN DO MIRACULOUS** THINGS FOR THEIR ANIMALS—SO WHY CAN'T VETERINARIANS EMBRACE THE CANNABINOID? BY AMY L. HOGAN

Barca was slowly recovering from COVID-19 while watching his longtime canine companion,

Buddy, struggling with his own mobility. "We were taking four walks a day, but in April, I noticed Buddy was starting to labor up the hills around our neighborhood," recalls the New York City native. "He's 7 years old and a few pounds too heavy, but Buddy looked like he was really using too much effort to stand up."

Barca, who is actively involved with the Grateful Doggies Rescue Family organization, at first cut back on park adventures but neither he nor Buddy were thrilled with their lack of exercise, so he decided to give CBD a try. In June, Barca started giving Buddy 5mg CBD

n the spring of 2020, Matty by Mindleaf CBD. "Since we started the regimen, I've noticed he stands with much less effort. We're walking more, and Buddy's losing weight. He has regained a puppy-like enthusiasm."

Barca and Buddy aren't the only believers in the benefits of CBD for furry friends. Feline enthusiasts claim CBD has the ability to ease excessive crying and hiding, and help curb aggression toward other animals, while the canine crowd testifies CBD can help with everything from excessive barking and nausea on car rides to soothing them during thunderstorms. A recent study observing 32 dogs on CBD over 90 days found 94 percent of owners felt the treatment positively impacted the dog's quality of life. And the market keeps growing. Accord-

treats that are made in small batches ing to a 2020 study conducted by Nielsen



in their pets thanks to CBD.



and Headset, CBD pet products will comprise 3 to 5 percent of all hemp-CBD sales in the United States by 2025.

Even celebrities like Martha Stewart are on board with cannabis for critters. The 79-year-old lifestyle guru recently partnership with Canadian company Canopy Growth. And Stewart has seen her five dogs–a French bulldog–noting: "[He] has a little anxiety...he gets a few quite favorably."

VET LIMITATIONS

Despite anecdotal evidence and owner testimonials, the hemp extract is not even an option for many veterinarians. But even when a state has more lenient

"The FDA has yet to determine a policy on CBD for animals," explains Gary Richter, MS, DVM, owner and medical director of Holistic Veterinary Care in Oakland, California. "It is not approved as either a pharmaceutical launched a line of CBD pet products in or a food additive, and there is no legal category for nutritional supplements in veterinary medicine. Therefore, all firsthand how CBD has benefited one of hemp-based CBD products that are being sold are technically illegal."

While there's little enforcement at drops of CBD oil every day and responds the federal level, each state has its own rules, which often vastly differ from those in other states. "Our ability to sell, dispense, recommend or even discuss CBD is largely governed by our state veterinary medical boards," Richter says.

laws, that doesn't necessarily mean your vet will be on board: "Regarding alternative treatments, the majority of the veterinary industry is what you might call 'conventional' in their practice and outlook." Still, many of his patients' own-

ers sing CBD's praises, and he's hopeful things

Never give your pet . THC or let them near your personal stash. Dogs and cats don't get the high humans do—but they can become sick and extremely frightened.

will change soon. Some vets are already starting to open up. "I'm a traditionalist, but when traditional medicine doesn't work, I'll always look for alternative treatments," says Jay Allen, DVM, of

Leesburg, Florida. One of the first vets to embrace cold-laser technology before it became a mainstream treatment, he believes CBD will follow a similar path toward acceptance. After having experienced CBD's healing abilities for his own arthritic neck, Allen decided to give it a try on his four-legged friends. "I got tired of traditional things not working," he says with a laugh. "It's not my first choice, but after all the traditional medications fail, why not try CBD?"

MULTIPLE APPLICATIONS

Allen was so impressed with Agape Blends' full-spectrum CBD Pet Tincture that he gave bottles to 10 other area practitioners. "Five of them quickly called back to ask where they could get more," he recalls.

What they witnessed was powerful. One dog had long suffered from severe separation anxiety. "We either kept him doped up or he tore the house apart when everyone left," says Allen. "His owner gave him CBD and two days later, she called and said, 'He's a new dog!'"

Allen also recalls how amazed a truck driver was when his cocker spaniel went from having 10 seizures a day in the truck to only two after trying CBD. Another dog, who had been misdiagnosed and was suffering from pancreatic problems and liver failure, had too many health issues to be put on steroids or painkillers. "They started him on CBD, and in three weeks we had that dog's bloodwork back

down to normal," says Allen. "He was out of pain and feeling comfortable."

Franklin, Tennessee, native Mike Luna had a similar experience when he, too, started his 7-year-old dog on a regimen of Agape Blends' pet tincture after the pup suffered a spinal stroke. "He was paralyzed in his back left leg and had to learn to walk again through therapy," shares Luna. "I started giving him CBD twice a day to help with inflammation and overall stress. He's much happier, calmer and more comfortable since taking the CBD."

CBD can be extremely beneficial in aiding in pain relief for older dogs and those dealing with arthritis, adds Allen. "It can be used as an adjunct to other medications like steroids, to push them just a little bit further out of pain."

While that all sounds wonderful, it's difficult to filter the science from the testimonials without more trials and testing. "Again, it's all anecdotal," says Allen. "You can't label them [as] proven to do anything, but clearly it works."

It's true that research has been minimal. Most tests in the 1970s and '80s that were done on dogs focused on the potential impacts of cannabinoids on humans, rather than on how they could benefit animals. A 1975 study did find that dogs have high concentrations of CBD

PICKS FOR PETS

Scores of CBD products for animals popping up on shelves can make choosing the purr-fect item for your pet overwhelming. Here are some of the smart choices.



TINCTURES Adding a few drops of CBD to pet food is an easy way to work in the benefits of daily hemp. Nancy Duitch,

founder and CEO of Sera Labs, created their SeraPets Pet Relief line, including tincture. out of unconditional love for animals. "People are always looking for solutions to make their pet happy and it helps that we are huge pet lovers," she shares. Her company also ensures "all of our products have **Certificates of Analysis** to determine purity." seralabshealth.com

The same is true for Mindleaf CBD, which, in addition to its allnatural 5 mg treats \$10, also crafts lab-certified **CBD** pet tinctures available in both 250 mg (for smaller dogs) and 500 mg bottles for larger breeds \$35-\$50. mindleafcbd.com

Pet-Ness utilizes a unique cold-extrusion process for their soft chews \$30. which contain no water or gumming agents and are free of preservatives. "Without heat, we can preserve the taste and benefits of the ingredients. Heat can deteriorate the effectiveness of the product, so we simply avoid it," says Jeremy Feldman, co-founder and brand director of Pet-Ness. petness.com BeniHemp's peanut butter treats \$20 contain oil extracted from American-grown hemp using their unique CO2-based method, with zero traces of THC. benihemp.com

receptors in the cerebellum part of their brains, which could explain why canines tend to react well to CBD treatments.

Also of note, of all the clinical trials conducted on dogs, the most prevalent negative effect of CBD was diarrhea. "I've never known an animal to die from CBD," says Allen.

As science continues to uncover the health benefits of CBD, vets like Allen and Richter expect it will become much more of a mainstream option. Richter states, "My biggest hope is that the research effort continues and we learn more about how CBD, and other cannabinoids, can help veterinary patients."



EDIBLE TREATS

TOPICALS

We Bee Kind's fullspectrum CBD Puppy Paws salve \$8 is perfect for use on dogs as well as cats. Owners rave it helps moisturize

dry skin, heal cracked paws and soothe their four-legged aches and pains. And many of the botanicals found in the products are grown in the Humboldt County, California, backyard of company founder Mallory Wiebe. webeekind.com

Pet-Ness also makes a 250 mg salve called Royal Balm **\$30** that will pamper your pets and help clear up any irritating skin issues. petness.com

WE BEE KIND

Full-spectru CBD Salve

FOR PETS

Puppy Paws

O4 Cannabis Culture

POT IS POPPING UP ALL OVER THESE DAYS! GET DREAMY SKIN FROM DOC-RECOMMENDED CBD SKIN CARE PRODUCTS. DISCOVER SUBSCRIPTION-BOX SERVICES THAT DELIVER TO YOUR DOOR. RELIVE THE LONG, STRANGE HISTORY OF MARIJUANA ON-SCREEN, AND CHECK OUT OUR DROOLWORTHY EDIBLE PICKS. PLUS, SEE WHAT TODAY'S TOP STARS HAVE TO SAY ABOUT THE WORLD OF WEED.



Etal Ganja Glow

WITH ANTI-INFLAMMATORY AND ANTIOXIDANT PROPERTIES, **CBD CAN BE A SUPER-**POWER FOR YOUR SKIN.

> Since the passage of the 2018 Farm Bill, CBD has become skin care's hottest ingredient.

All skin types can benefit from regular use when adding a CBD beauty product to your daily skin care regimen."

-Aesthetician Elina Fedotova

rom the gas station to the pet store, cannabidiol seems to be everywhere these days. And the beauty biz is no exception. A quick Google search reveals oodles of articles in fashion mags about CBD's ability to transform skin, and it has been popping up on the shelves of highend beauty counters, as well as on the prescription pads of respected dermatologists all across the country.

Unlike some buzzy beauty fads, CBD appears to be here to stay. A recent report from market research firm Million Insights found the global CBD skin care market is expected to reach \$1.7 billion by 2025-an almost 39 percent increase from 2019. The firm's conclusion: "CBD-infused beauty products can be used for all types of skin, as they are very effective and safe."

We spoke to dermatologists and aestheticians to have them explain the science behind CBD skin care, and get recommendations on their favorite products.

A MATCH MADE IN HEAVEN

Quickie science lesson: Cannabidiol (CBD) produces effects in your body because it interacts with the endocannabinoid system (ECS). The ECS is composed of two types of receptors-CB1 and CB2-that are scattered throughout your body, explains Adam Mamelak, MD, an Austin, Texas-based board-certified dermatologist. "The CB1 and CB2 receptors for CBD can be found in the skin on sebaceous glands, hair follicles, cutaneous nerves and mast cells," he says.

If sebaceous glands sound familiar, it might be because they play a major role in acne by producing a type of oil called sebum, which can trigger breakouts. As cannabidiol can reduce production of sebum, explains Mamelak, CBD-based skin care products could help put your pimples in the rearview mirror.

And that's just the start. "CBD has antioxidant benefits for your skin," says Mamelak, which mean it may help fight the signs of aging such as fine lines and wrinkles.

You've probably heard how the anti-inflammatory properties of CBD topicals can help with post-workout recovery and pain relief, and that same

principle applies here with inflammatory skin conditions, says Mamelak. "CBD is also beneficial for eczema, psoriasis and dry and itchy skin."

Stephanie Ivonne, a licensed aesthetician who serves on the advisory board of the website Smart Style Today, has been particularly impressed with the effects of those anti-inflammatory properties."Though CBD skin care products can't cure skin conditions," she says, "they can soothe and help in healing flare-ups when used in addition to daily preventative measures."

The benefits of CBD skin care products go beyond treating, according to Elina Fedotova, a cosmetic chemist, aesthetician and founder of Elina Organics Skin Care and spas. She notes that CBD "helps to reduce free radicals, which can help heal your skin from sun damage." Also, thanks to its "skin-restoring and calming effects, CBD is fabulous for inflamed acne and rosacea-prone complexions."

ACROSS THE BOARD BENEFITS

All that potential sounds wonderful, but is CBD skin care really for everyone? After all, so many conventional skin care lines are grouped by skin type: People with oily skin shop on different shelves than those who are prone to dryness or, more confusingly, facing the challenge of combination skin.

But when it comes to CBD-based skin care products, everyone can partake, says Fedotova. "CBD is beneficial for every complexion because it contains a blend of beauty vitamins like A, C and E, which are powerful antioxidants that help to promote collagen and have strong antioxidant effects.'

Ivonne concurs. "One thing about CBD skin care that I personally like is that when I recommend that a person try these types of products, there is very little chance of negative reactions, regardless of your skin type," she adds.

PROCEED WITH CANNA-CAUTION

Like so many things cannabis-related, however, not all CBD skin care products are created equal, warns Mamelak. "The amount of CBD in your product is important," he says. "Higher concentrations of CBD will be more effective."

One way to tell if you've got an effective product? Read the label carefully. "CBD should be one of the top ingredients, not at the bottom," warns Ivonne. While this may seem pretty basic, in the unregulated world of CBD, almost anyone can slap on a CBD label even if the cannabinoid is in extremely low concentrations.

Once you've identified a product with plenty of CBD, the form of cannabidiol is next on the checklist. "There are a number of 'types' of CBD used in beauty products," says Mamelak, referring to full-spectrum CBD, broad-spectrum CBD and CBD isolate oils. Full-spectrum CBD oil is the most desirable skin care additive, he explains, because "it has all the compounds found in hemp, includ-

> CBD helps reduce sebum and may be effective in fighting acne." -Adam Mamelak, MD

ing trace amounts of THC." That means you're likely to get more dramatic results.

Finally, says Ivonne, it's important to know what else is in your CBD skin care. She recommends doing the same research you would with any other beauty product. "CBD products will work better in achieving the healthier skin you desire when they contain other proven effective ingredients, such as retinol for anti-aging and hyaluronic acid for hydration," she says. And, Ivonne cautions, "Although the use of CBD in our beauty products is fairly new and popular, there is still more research that is being conducted." So your results may vary, even if you choose products with high CBD concentrations.

EXPERT ADVICE

Ready to take a walk on the hemp side of beauty? Here are the top CBD skin care picks from our experts.



ELINA FEDOTOVA



ELINA ORGANICS CBD AGELESS WRINKLE FILLING SERUM \$38-\$88, elinaorganicsskincare.com

No surprise: Fedotova's faves come from her eponymous line. "This botanical serum contains collagen-restoring ingredients and helps to firm the skin," she says. "It can also improve facial contours by increasing elasticity."



ELINA ORGANICS CBD AGELESS RICHE LIPOSOME CREAM \$57, elinaorganicsskincare.com "This lush formula will renew and brighten your skin."





LORD JONES HIGH **CBD FORMULA BODY LOTION** \$40-\$60, lordjones.com

"It's vegan, clean and cruelty-free," says Mamelak. "And it has shea butter, so it's soothing and restoring."



CANNUKA CALMING EYE BALM \$38, cannuka.com This balm is eye-opening with beeswax and hemp seed oil.



ILDI PEKAR TISSUE REPAIR SERUM \$148, ildipekar.com Mamelak says this serum is worth the price, with its "hyaluronic acid, vitamin C, and aloe."



"The name is a handful but this noncomedogenic oil allows your skin to breathe without risking pores becoming clogged," she says. "Those who aren't fond of fragrances will find a more airy, earthy scent that is very light, even if you have allergies. This oil moisturizes, gives skin a healthier, supple-looking glow and keeps skin feeling soft and hydrated."

It's important to check the label to see what's in your products.

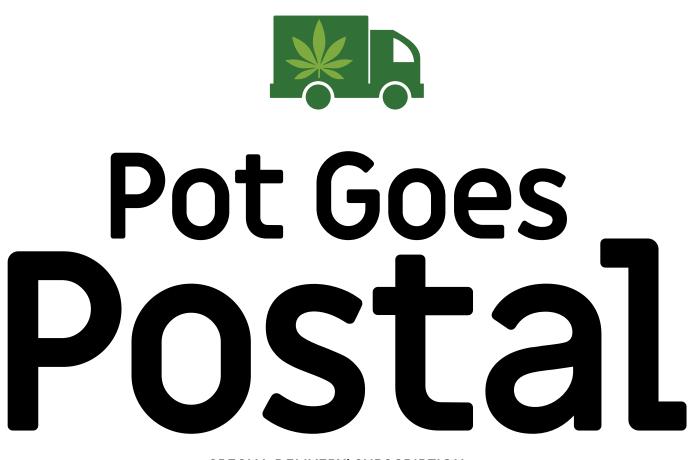
HERBIVORE

EMERALD

100mg CBD + ADAPTOGENS DEEP MOISTURE GLOW OIL pour éclat et hydratation

STEPHANIE IVONNE

HERBIVORE'S EMERALD **CBD + ADAPTOGENS DEEP MOISTURE GLOW OIL** \$58-\$98, emerald.herbivorebotanicals.com



SPECIAL DELIVERY! SUBSCRIPTION SERVICES DELIVER A FRESH CROP OF CANNABIS GOODIES RIGHT TO YOUR DOOR.

BY AMY L. HOGAN

ho doesn't love finding a pleasant surprise in their mailbox among the bills and ad circulars? That idea has been the driving force behind the booming success of subscription boxes for the past 15 years. There are currently companies shipping everything from curated cosmetic kits to children's activity crates...and finally cannabis is in the mix!

With the global COVID-19 pandemic making every shopping outing a potential adventure in virology, getting marijuana in the mail is all the more

appealing to cannabis connoisseurs these days. But with the plethora of weed-packed subscription services popping up, picking the right one can seem overwhelming. Luckily, there really is something for everyone in this rapidly expanding market.

We chatted with several companies and their clients to break down some of the key differences between box services. Consider this your cheat sheet to figuring out the best subscription box experience for your cannabis needs and-perhaps even more importantlyyour canna-budget.

With 20 years combined experience in cannabis, Eliza Maroney says she and husband Luke "wanted to pivot from cultivation to curation" so Lucky Box Club was born.

UUN

LUCKY BOX CLUB

Subscribers sing the praises of Lucky Box Club over and over again. "This is the only one you need," enthuses San Francisco mom Spring Webber.

The company offers two types of boxes: pre-curated seasonal collections (\$199) and custom-curated boxes (\$349 for a three-month subscription). Webber's a loyal fan of the custom-curated boxes because of how perfectly personalized the products are. Lucky Box gives custom clients an extensive survey during the "intake process" and uses that info to select items that best reflect one's interests. "Our motto is 'There's Magic in the Box' and we certainly live to serve," explains Eliza Maroney, who co-founded the company with her husband, Luke. She encourages cannabis lovers to think outside the box when it comes to the Lucky Box Club. "It's the perfect holiday gift and a wonderful alternative to bring to a party instead of the traditional bottle of wine!" \$199-\$349, luckyboxclub.com



A recent Hempa the Explorer box contained cbdMD bath bombs, Natural State CBD cotton candy and Myaderm CBD sport cream.

HEMP CRATE

Every Hemp Crate is guaranteed to be bulging at the seams with highquality CBD products, as well as easy-to-understand helpful information about cannabidiol. You customize the whole process, starting with selecting one of their ever-evolving themed boxes. (Recent themes have included Health & Wellness and Furry Friends.) For those interested in a wide variety of products, the Hempa the Explorer Box is likely

the way to go to ensure you get a large sample of everything CBD has to offer. Then you can decide if you want to try one month, or save on shipping by selecting three- or six-month stints.

"I have loved the bath bombs and edibles," confides Birmingham, Alabama-based massage therapist Kristine Medley. She appreciates that the products are organic and independently lab-tested. "They do all the major work to find the best in CBD!" \$45-\$70, hempcrate.co



THE HIGH **SOCIETY BOX** AND MEMBERSHIP **AT THE NATURAL CANNABIS** COMPANY

Customers of The Natural Cannabis Company in Northern California can get in on some sweet rewards—including exclusive shopping days and VIP events—if they become a member of The High Society by buying an ultraswanky (and pricey) Hot Box. The package changes quarterly, and is loaded with myriad marijuana delights. The company strives to create an exquisite array of the very best California cannabis products,

including rare flower strains not available in stores, as well as tinctures, crumble, vapes and THC capsules. "Each of the collectible

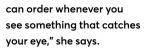
Hot Boxes themselves features incredible artwork from our annual High Art Competition, which takes place each February," says Natural Cannabis Company's art and creative director, Noa Commendador. "Artists from all over the world submit their cannabis-inspired artwork for a chance at a \$15,000 prize and a \$10,000 donation to an international charity of the winner's choice." \$300, naturalcannabis.com



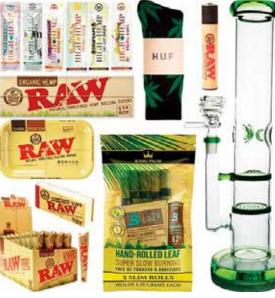
July's collectible Hot Box featured an eighth of Walnut Lane's GG #4, Dosha's Dosi Punch Superblunt and a gram of Blessed Extracts' Blue Dream Crumble

THE WEED BOX

If you're looking to expand your glass collection, you'll love The Weed Box. "We believe everyone deserves a good, quality setup and shouldn't have to pay hundreds of dollars to get it," explains spokesperson Jenny Berman. The box themes change monthly and there's never a commitment to buy. "You



"It caters to every audience," notes satisfied customer Kyle Johnson from Fountain Valley, California. "Each new piece of glass has really elevated my smoking experience and I've tried things I never would have before, without much financial risk." \$89, twbox.net



over \$250 in pot products, including a 12-inch water pipe, a three-pack of RAW Cones and a whimsical pair of HUF socks.

DAILY HIGH CLUB'S SMOKING SUBSCRIPTION

The August VIP Limited Edition Box was loaded with

The El Primo Box by Daily High Club's Smoking Subscription is discreetly shipped directly to your abode with over \$100 worth of accoutrements carefully packed inside. "These boxes are brilliant since I collect unique glass," enthuses New

Jersey grad student Aimee Clemens.

"Getting the box is a whole experience! That's what I look forward to," shares Tanya Singer, an NYC-based fan. That's the kind of satisfaction that Daily High Club's CEO and founder, Harrison Baum, strove for when he started the company with just \$700.

THE LEGAL LOWDOWN

The 2018 Farm Bill made it legal to ship hemp-

derived CBD (under 0.3 percent THC) to all 50

get you in trouble in Kansas, where products

adult use, and some require in-store pickup.

must contain no THC at all). Boxes containing

marijuana-derived products can only be sent in-

state, even if you live in another state that allows

states (though opening the box could theoretically



A recent BlackBox was loaded with over \$260 worth of buzz-worthy goodies like Moon Rocks, a half-ounce flower sampler of four different strains, and a delicious edible or soothing topical, such as beard oil or "body budder."

BLACKBOX

With a vast menu of offerings, the BlackBox is completely customized. Each box includes a halfounce of flower, an edible and a concentrate or topical/health item, and a wellness product, plus, an accessory. "I am always stoked when it gets here," raves regular subscriber **Candace Coulson in** British Columbia. "They go above and beyond with packaging and presentation. There's a wax seal, for goodness' sake! It makes me feel like I'm part of a club or a secret society."

But rest assured—there's nothing uppity about this cool-kids club that any Canadian of age with an interest in cannabis can join. "There is no pressure when getting a BlackBox—you're not tied into any monthly contracts," says Josh Gulewitsch, the creator of BlackBox. "Our members enjoy the fact that they don't have to worry about making a payment for next month's box. Enjoying cannabis shouldn't be stressful, which is why we offer one-time boxes." \$199, theblackbox.club

"They've [since] sold over 500,000 bongs with no outside funding," says spokesperson Megan Cunningham. But it's the exclusive collaborations with famous marijuana advocates like Tommy **Chong and Cypress** Hill's B-Real that really make this smoking subscription unique. \$30, dailyhighclub.com



A recent box focused on "getting back in sesh" safely at home with science-inspired custom alass and accessories—like the alass pencil poker and Scientific Beaker Bubbler/Bong—notes Daily High Club's Megan Cunningham

How Marijuana Went Mainstream On-Screen

A LOOK AT THE LONG, STRANGE TRIP OF POT PORTRAYALS IN FILM AND ON TV. BY SHARI GOLDHAGEN

he history of cannabis on-screen is, well, it's something. Perhaps because the birth of modern cinema coincides with the first criminalization of marijuana in the U.S. in the 1930s, pot on film and TV has been demonized, exorcised or just plain wrong. But changes in attitudes about marijuana in the past few decades have carried over into some representations. With the help of film critics Ryan Lambert, founder of flickpicking.org, and Mara Reinstein of maramovies.com, we look at some of the herb's most notable on-screen appearances, from laughable morality plays like Reefer Madness to modern takes like Atlanta and Inherent Vice that inch closer "to more realistic ideas of what it's like to smoke weed," says Lambert. And of course, no history of the devil's lettuce on-screen would be complete without a "very special episode" and The Dude.

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> in tals in tals Mac waa ike of Ho Ge of Th hig Da that (Th top La tur fill cei (of an what a

1924 High on the Range 🔺

A cowboy turns into a killer after dabbling with weed in this silent Wild West piece of antidrug propaganda also known as *Notch Number One*.

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1930s Song and Dance

Marijuana in Depression-era flicks of the early 1930s was something to sing about...literally. Jazz musicians like Cab Calloway can be found belting out the praises of weed in flicks like *The Big Broadcast* and *International House*, where Calloway sang his iconic "Reefer Man." And Gertrude Michael crooned about the "soothing caresses" of "Sweet Marihuana" in *Murder at the Vanities*.

1936 Reefer Madness 🔶

This infamous and oft-spoofed antidrug PSA showed high school students (including Dorothy Short and Dave O'Brien) rapidly spiraling into ruin after sampling the wares of a pot-peddling (and cohabiting!) couple (Thelma White and Carleton Young). "It was so over-thetop that it seems satirical by modern standards," says Lambert. "The message was using marijuana would turn you into a crazy sex-addicted murderer."

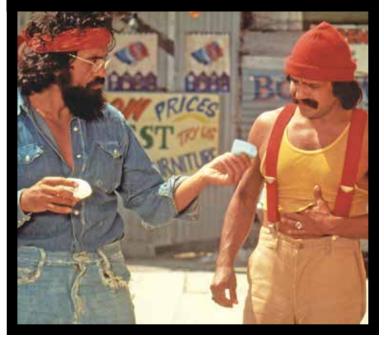
1934–1968 Self-Censoring

Under fire from conservative groups over scandalous film content, the movie industry adopted a policy of selfcensorship called The Motion Picture Production Code (often called the Hays Code after Motion Picture Producers and Distributors of America's president, Will H. Hays), which vowed "the sympathy of the audience shall never be thrown to the side of crime, wrongdoing, evil or sin." This meant everything from interracial relationships to blasphemy, and almost all sex was a no-go. Illegal drug use was also on the "don't" list. "As a result, there are almost no depictions of pot at all during this time," says Lambert.



1967 Dragnet 🔺

Drugs were rarely shown on television in the '60s, but in the episode "Big High," Detective Joe Friday answers a call about a young couple throwing pot parties. "[It] depicts the effects of marijuana to be more like heroin, turning the couple into hopeless addicts, nodding so hard they don't realize their child is drowning in the bathtub," writes Jacob Trussell for the website Film School Rejects.



1978 Up in Smoke 🔺

Comedians Richard "Cheech" Marin and Tommy Chong made their feature film debut as affable pot enthusiasts in this madcap caper. Despite negative reviews, *Up in Smoke* made over \$100M and remains a counterculture classic. "Even if you've never seen any of their films, everyone knows who Cheech and Chong are," says Reinstein. "They really paved the way for the stoner genre."

1969 Easy Rid<u>er 🔶</u>

In a marked departure from the Hays Code, Peter Fonda and Dennis Hopper play drugsmuggling motorcyclists, who hit up brothels and pass a joint back and forth in this much-lauded cult classic. "It was really a landmark film," says Lambert. "It showed Hollywood was ready for more artistic freedom and more realistic portrayals of drug use."



1980s Special Episodes +

The Reagan years amped up the "war on drugs" with stricter laws and ubiquitous PSAs; to this day, no child of the period can look at a fried egg without thinking that's her brain on drugs. Hit shows of the time echoed the message with special episodes about the evils of the herb. Characters on sitcoms like *Punky Brewster, Saved by the Bell* and *Diff'rent Strokes* (right) and countless Saturday morning cartoons took Nancy Reagan's lead by just saying "no."

1982 Fast Times at Ridgemont High **>**

This coming-of-age dramedy follows teens (including Jennifer Jason Leigh, Judge Reinhold and Forest Whitaker) through a year of statutory rape, pregnancies and fast-food pirate attire—but Sean Penn's surfing stoner, Jeff Spicoli, steals the show. "You say the name Spicoli, and everyone still knows exactly what you mean," says Reinstein. "He was something different."

1993 Dazed & Confused

The Richard Linklater flick follows a group of Texas teens—up-and-comers Ben Affleck, Parker Posey and Matthew McConaughey—on the last day of school in 1976, where many casually take a toke. Though set in the past, the film was a product of the '90s, when President Bill Clinton admitted to experimenting with weed (although famously not inhaling). "The country's mood is different and you start to see a softer take on the way marijuana is shown on-screen," says Lambert.

1995 Clueless +

In Amy Heckerling's flick about Beverly Hills teens, Cher (Alicia Silverstone) and Tai (Brittany Murphy) casually take a puff at a party. "It stands out because of how much it *wasn't* a big thing," says Reinstein. "There aren't repercussions; it's not a big deal." A year earlier, *Reality Bites* had Gen-X college grads (Winona Ryder and Ethan Hawke) passing a joint and quoting sitcoms. "They're disillusioned; of course they're smoking weed. But Cher is a 15-year-old high school student who cares about fashion. Her taking a hit represented a moment in the zeitgeist."

1998 The Big Lebowski 🔶

It's been more than 20 years since "The Dude"—the weed- and white Russian–loving laziest man in LA (Jeff Bridges)—tried to retrieve the rug that "pulled the room together," but you'd never know based on his booming popularity. "The character still resonates so much today; there are actual *Lebowski* fests," says Reinstein of the Coen Bros. flick. "Everyone knows and loves The Dude."

















1999 American Beauty 🔶

In Sam Mendes' best-picture Oscar winner, a middleaged magazine exec (Kevin Spacey) bonds with the cannabis-peddling teen next door (Wes Bentley), while smoking up and working out. "It isn't a film about drugs or drug culture; it's about a man having a midlife crisis," says Lambert. "[Pot is] not dwelled upon and it doesn't really move the plot forward. It's just a moment that happens. I remember loving that scene and thinking it was something I hadn't seen before."

2001 South Park +

In the animated series' fifth season, Trey Parker and Matt Stone introduced Towelie, a red-eyed towel who just wants to get high. When Cartman calls him "the worst character ever," the terry-cloth one agrees. A good chunk of South Park fans beg to differ.



2004 Harold & Kumar Go to White Castle +

In the grand tradition of Cheech and Chong, pot pals Kumar (Kal Penn) and Harold's (John Cho) munchies-driven quest to score snacks goes horribly awry in the first film of the franchise.

2005 Weeds 🔶

Suburban mom Nancy Botwin (a stellar Mary-Louise Parker) created an unlikely marijuana empire on the Showtime megahit that introduced many to the world of canna-biz. But Starbucks-sipping Nancy herself rarely sampled the merchandise, and the show "did continue to focus on the criminality of cannabis—especially in later seasons—without really attempting to reckon with negative stereotypes the show portrayed," writes Trussell.

2008 Pineapple Express +

In the vein of Cheech and Chong, this bro comedy sees process server Dale Denton (Seth Rogen) and his dealer Saul Silver (James Franco) stumble into a world of kingpins and corruption after they witness a murder. Unlike a lot of other stoner fare, this Judd Apatow-produced jaunt wasn't an indie release but a major studio production from Columbia with a healthy \$15 million budget. It was hardly the first or last time weed enthusiast Rogen played an affable stoner; still, Reinstein notes, "He's a leading man. A lot of his characters are pot smokers, but they lead productive lives and often get the girl."



2014 Inherent Vice 🔺

In this Paul Thomas Anderson neo-noir thriller based on the Thomas Pynchon novel, Joaquin Phoenix's Larry "Doc" Sportello is a detective with a penchant for pot who manages to get the job done. "He's a levelheaded laid-back stoner detective living in the world where a lot of things are outside of his control," says Lambert. "He's not played as a goofball. It's just a part of his life."





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2014 Broad City

Comedy Central finally gave female stoners their due by picking up the web series developed by stars Abbi Jacobson and Ilana Glazer, who play pro-pot BFFs trying to make their way in the Big Apple. "I like the idea that women carry their own weed and buy their own weed," Glazer has said. "I like that, because it's me." Scores of think pieces from she-stoners, excited to finally see themselves represented, concurred.

2016 Atlanta 🔶

There's plenty of puffing on this Emmy-winning FX series about aspiring rappers created by, and starring, Donald Glover. But rather than playing the characters' highs for laughs, Glover opts to show marijuana use as a coping mechanism and ordinary part of life. "The characters aren't smoking weed all the time because it's cool but because they have PTSD," he told *The New Yorker*. "Every Black person does."

2016 High Maintenance 🔶

The HBO anthology series—which began as a web series created by Ben Sinclair and Katja Blichfeld—follows the misadventures of The Guy, an NYC weed dealer played by Sinclair. "What sets *High Maintenance* apart from practically every other representation of marijuana is that it expressly does not focus on smoking pot," writes Trussell. "It's more interested in the idiosyncratic personalities and relationships that The Guy builds as he becomes a kind of weed-dealing therapist to his clientele. This isn't a stoner comedy that glorifies getting high...but rather an intellectual anthology show that normalizes cannabis by looking at the myriad reasons why modern adults choose to consume it."

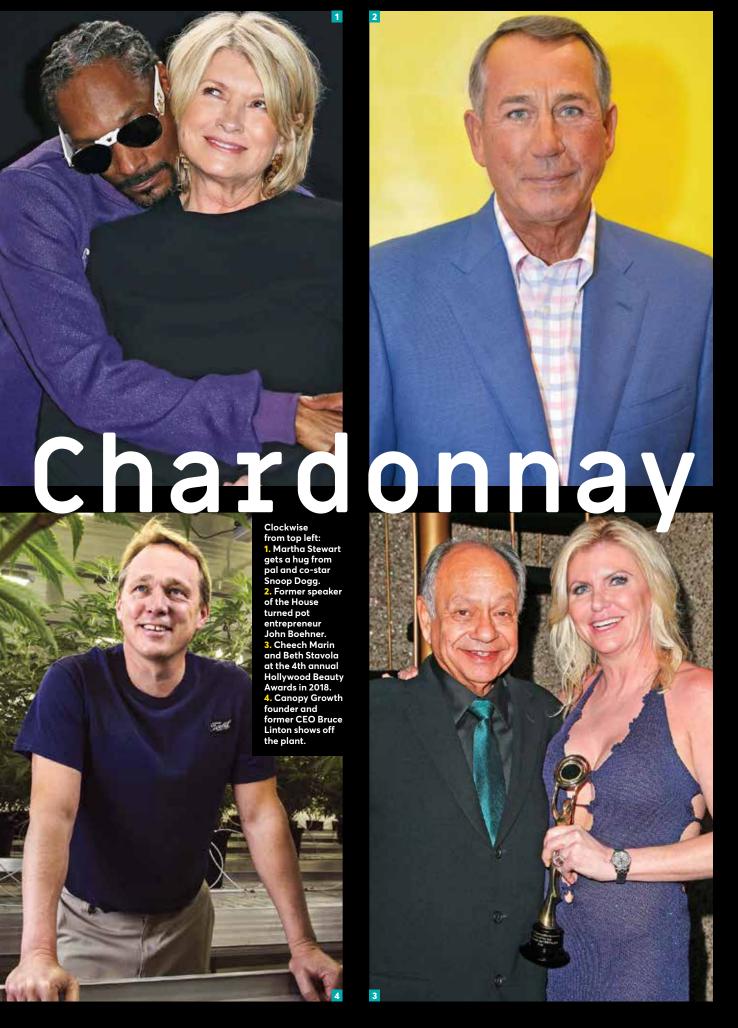
Documenting The New

BESTSELLING AUTHOR HEATHER CABOT TALKS ABOUT HER BOOK CHRONICLING HOW MARIJUANA TRULY WENT MAINSTREAM. **BY SHARI GOLDHAGEN**

ward-winning journalist Heather Cabot first got an inkling to tell the tale of the exploding marijuana biz in 2017, when she noticed a few women in her network-educated professionals and mothers often in Gwyneth Paltrow's GOOP set–were considering investing in the emerging cannabis space.

"As a kid who grew up in the 'just say no' generation at the height of Reagan's war on drugs, seeing marijuana suddenly being sold in gleaming stores and promoted as an upscale wellness elixir to help Whole Foods and Equinox devotees unwind was unbelievable to me," says Cabot. "When longtime marijuana foe and former speaker of the house John Boehner made forays into the industry, Martha Stewart joined forces with Snoop Dogg to star in a pot-humored TV show, and O, The Oprah Magazine started featuring THC-tea parties, it was an Alice in Wonderland moment. Curiosity got the better of me. As a journalist, mom and

Clockwise from top left: 1. Martha Stewart gets a hug from al and co-star oop Dogg. of the House urned pot Cheech Marin and Beth Stavol nton shows of



Gen-Xer, I wanted to understand how it happened: how the gateway drug of my youth had shed its stigma so rapidly."

Thoroughly invested, Cabot dove in headfirst to research her new book, *The New Chardonnay: The Unlikely Story of How Marijuana Went Mainstream* (Penguin Random House, 2020). She spent more than a year studying the canna-biz to figure out how to "tackle" it before submitting her book proposal. "And because the industry was changing so quickly, I had to cover it like a breaking news story–constantly checking in with my sources and reading everything in sight so I didn't miss a development."

It was an epic journey that led her across the United States and Canada, where the wild west of cannabis was evolving every day. There were exclusive underground speakeasies and VIPfilled parties, where celebs clamored to sample special strains or exotic edibles; tours of facilities, test kitchens and labs, where chemists and cooks tried to find the next big thing in cannabis culture; boardroom meetings with big execs, stops at cannabis trade shows–even a shuttle with seniors making their monthly shopping trips for pot products. And hundreds of hours of interviews.

FINDING HER CAST

"I knew from my television-reporting days that a complex story like this one needed unforgettable characters to drive the narrative," says Cabot. "Luckily, there was no shortage of them in the cannabis industry."

Cabot chose to highlight the trajectories of a handful of innovators who began clawing their way into the legal cannabis business in the early days in the mid 2010s. Her cast includes rapper Snoop Dogg's business partner, Ted Chung, a Wharton Business School grad, who oversaw the Doggfather's epic entry into the cannabis business—from his signature Leafs by Snoop pot products to his cooking show with Martha Stewart.

There's Bruce Linton, aka "The Willy Wonka of Weed," who founded the world's largest cannabis company in an old Canadian chocolate factory. Jeff



I think people will be surprised to discover the range of people building business and investing in the industry, as well as their motivations for taking on such risks."

—Heather Cabot

Danzer, aka Jeff the 420 Chef, a home cook turned cannabis restaurateur who took canna-cuisine to new heights with his invention of Culinary Cannabis– odorless and "tasteless" canna-oil, canna butter and pre-rolls.

And the woman whom rapper Flavor Flav dubbed the "Queen of Marijuana," Beth Stavola, a former Wall Street exec and New Jersey mother of six who risked everything to start a marijuana business in the Southwest. "I was captivated by her stories about the criminals she faced when she went to Arizona and the Mexican border alone," says Cabot. "Once she told me about the bodyguard and private investigators she had to hire to protect her family; the ex-Secret Service agent she hired for security; all the red and blue politicians to charm; the Vegas kingpins she had to go up against and all of the potentially perilous mistakes she made along the way–I was hooked."

Cabot tagged along with her crew on some epic adventures, spanning the social, economic and political aspects of the "green rush." "There were so many crazy and surreal moments," she says. "Sitting beside Beth while she was on the massage table as she juggled calls and emails from her associates in Las Vegas. Or riding through rural Ontario with Ted Chung in a chauffeured SUV on our way to the old chocolate factory where Bruce Linton had built his global cannabis corporation and then getting a two-hour personal tour from Bruce.... I went to Snoop's sound check at the Apollo Theater and hung behind the velvet curtain with his inner circle while Snoop was emceeing at the Mandalay Bay in Vegas."

The resulting nonfiction chronicle reads like a fast-paced novel, and has been garnering raves from the likes of *Shark Tank*'s Daymond John and Katie Couric, who called it "unforgettable."

LOOKING AHEAD

While *The New Chardonnay* is certainly entertaining, Cabot also hopes it will help shed light on some of the more challenging aspects of the industry that she wasn't aware of before starting the book, including the way that people of color have been disproportionately damaged by years of pot prohibition.

"[Before starting my research], I did not fully grasp the magnitude of the impact America's war on marijuana has had on mass incarceration," says Cabot. "Nor did I realize how this lucrative industry built atop that unjust legacy would end up sidelining the communities and



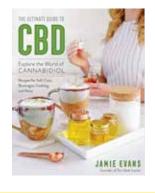
people harmed most by radicalized policies." While some states—like Illinois and California—have tried to build into their cannabis legislation opportunities and programs for minorities and women to get involved, she notes that thus far the impact is still meager.

"Startup costs can easily add up to more than a million dollars before a business has even opened its doors, but because these businesses are federally illegal, they can't just call up a bank to secure financing or apply for a federal smallbusiness loan," says Cabot. "That's why in the U.S. the big companies that now operate in multiple states were founded by people with independent wealth and/ or a network of wealthy private investors. It's also why the industry has continued to grapple with a gender and racial diversity problem. It's historically tough for women and people of color to raise venture capital, and even tougher in this world that is still highly stigmatized...but at least people are talking about these issues much more today than ever before."



SHE WROTE THE BOOK ON CBD

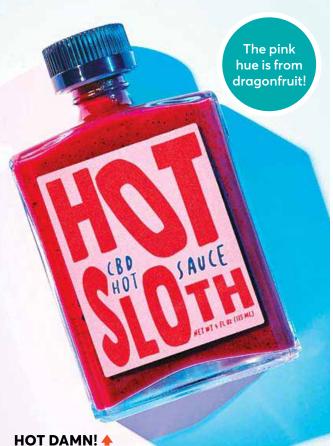
Want another great weed read? Check out Jamie Evans' The Ultimate Guide to CBD: Explore the World of Cannabidiol. The founder of the website Herb Somm, Evans is a hugely popular culinary-meetscannabis lifestyle guru known for her signature canna-events. Her new book explores all manner of DIY CBD wellness, from CBD-infused skin creams and candles, to cocktails and cuisine. "Cannabis is such an interesting ingredient," says Evans. "It adds new flavors and aromas and gives food a sense of euphoria."





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pink sauce has a tropical feel and contains 12 mg CBD per

teaspoon; a 125 ml bottle sells for \$36. pdhcbd.com

in biz) Kat Odell are the geniuses behind Hot Sloth CBD

BEAUTY AND BLISS

Classically trained chef Lauren Gockley's THC-

infused chocolate truffles and bars for Coda Signatures are almost too pretty to eat. But with delicious options like Caramel & Corn, Cream & Crumble, and Coffee & Doughnuts,

you really should enjoy them. Available in multiple formulations, they can be found in dispensaries in Colorado and California; must be 21+. codasignature.com



NOT YOUR MOM'S THIN MINTS 🔶

The famous thin mint cookie gets a very grown-up THC infusion (10 mg per serving) in BlueKudu's gluten-free Mint Kudu Kookies. These decadent dark chocolate and mint delights are currently only available in Colorado; must be 21+. bluekudu.com

MONSTER COOKIES

SDK's cookies constantly rank among Oregon's top edible baked goods, and they pack quite a punch with up to 50 mg per cookie (there's also a hemp-only THCfree version). Available in Snickerdoodle, Peanut Butter or Chocolate Chip flavors, these snacks are currently only available for Oregonians; must be 21+. sdksnacks.com



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Each vegan bon-bon has 15 mg of CBD!

THE GOODS

Greater Goods' line of CBDinfused confections offers delicious chocolates including Marshmallow Bon-Bons and bars in tantalizing flavor combos like Orange Ginger and Mint Hibiscus. Bars contain 100 mg of CBD and use only organic fair-trade ingredients. Edibles cost between \$6 and \$15, and can be shipped throughout the U.S.; must be 18+. hellogreater.com



LORDY, LORDY! 🔶

Get your calm on with Lord Jones' Old Fashioned Hemp-Derived CBD Gumdrops. Made in small batches from natural fruit flavors, each drop contains 20 mg of broadspectrum hemp oil. A nine-count box isn't cheap at \$45, but products can be shipped nationwide; must be 18+. lordjones.com

HANGOVER FREE

Calexo sparkling beverages pack 10 mg of nano-emulsified THC in each 22-ounce bottle for a rapid-onset high in 15 minutes. Flavors like **Citrus Rose and Cucumber** Citron claim to offer the giddiness of Champagne without the hangover of alcohol. Available at California retailers; must be 21+. calexo.co



POT OF GOLD

Pot d'Huile's extra-virgin olive oils have a little something extra—CBD or THC! Made with full-spectrum extracts from hemp grown on family farms in Cali, these oils will kick up any recipe and are available in a variety of concentrations. Prices range from \$28 to \$144 per bottle, and CBD-only products can be shipped nationwide. pdhcbd.com

WUNDER-FUL! **+**

Wunder's all-natural, cannabisinfused canned beverages contain 2 mg each of THC and Delta-8, and 4 mg of CBD for a wave of relaxation. It comes in three flavors: Watermelon Wave, Lemon Ginger Lift and Blood Orange Bliss. Right now you can only take a swig in San Francisco; must be 21+. findwunder.com





YUMMY **GUMMIES**



RELAXING RELEAF

Made with natural ingredients, Papa & Barkley Releaf Gummies contain 5 mg THC per piece and come in flavors including Tart Apple. papaandbarkley.com



HAIL TO THE CHEEF

Cheef Botanicals Vegan CBD gummies come in a variety of fruit flavors, and are available in multiple formulations between 10 mg to 100 mg of fullspectrum CBD in each bite. cheefbotanicals.com



EXCELLENT SELECTION

Curaleaf Select Nano Gummies each contain 5 mg of fast-acting THC. Flavors include Tropical Trip and Berry Buzz. Available at dispensaries; must be 21+. curaleaf.com

A GLIMPSE INTO THE WEEDY WORLD OF THE **RICH AND FAMOUS.**

What's the Buzz?

KENDALL IS A MODEL STONER

So...which Kardashian is into the kush? On an episode of "Sibling Revelry" podcast with Kate Hudson and Oliver Hudson, host Oliver asked guests Kendall Jenner and Kourtney Kardashian, "If there was a stoner [in your family] who would it be?"

"Kendall," Kourt quickly responded, and her fashion model sis agreed. "I am a stoner," Kendall said. "No one knows that, so that's the first time I've ever really said anything out there."

Kendall Jenne came out as a fan of the herb.

OLIVIA'S LIFE-SAVING PLANT 🕈

Since 1992, when she was first diagnosed with breast cancer, Olivia Newton-John has been open about her health and therapies. And in a video launching her namesake foundation in October 2020, the Grease star once again gave a shoutout to medical marijuana.

"Plant medicine has played an amazing role in my life," she said. "I have seen the incredible beauty of plants and their healing abilities. I know it sounds strange, but if I hadn't had that experience, I wouldn't be sitting here talking to you about kinder therapies."

After her initial treatment, the singer was in remission until 2013; since then, she has been actively battling metastasized cancer. She started the Olivia Newton-John Foundation to help others. "We will fund the discovery of kinder therapies and advocate for more effective ways to prevent, treat and cure all cancers," she said.

THE WAY THE POT GODS INTENDED

Seth Rogen shared his excitement that Pineapple Express, his 2008 stoner bro caper with buddy James Franco, was coming back to Netflix. "Watch the film the way we intended," he wrote on Twitter on Sept. 8. "On your couch while smoking weed."



BELLA'S FIRST PUFF

Bella Thorne loves weed so much she recently launched her own line of marijuana products, Forbidden Flowers. But the star of The Babysitter: Killer Queen recently opened up to fans about her very first time smoking the herb.

"I was on [my brother's] bed for two hours rocking back and forth," she shared. "But here's the thing: I was completely still the whole time."



WEED IN THE CARTER WHITE HOUSE 🔶

Former President Jimmy Carter set the record straight about the time country star Willie Nelson lit up a "big fat Austin torpedo" on the roof of the White House in September 1980.

"When Willie Nelson wrote his autobiography, he confessed that he smoked pot in the White House one night when he was spending the night," Carter says in the new documentary Jimmy Carter: Rock & Roll President. "He says that his companion who shared the pot with him was one of the servants in the White House. That is not exactly true it actually was one of my sons."

The 39th president says Nelson fudged the truth to protect Carter's kid—later revealed to be James Earl "Chip" Carter III, now 70—and shield Chip from the stoner stereotype.

Asked about it, Chip said Nelson had been playing at the prez's res. "In the break, I said, 'Let's go upstairs,'" Chip said, according to the New York Post. "We just kept going up till we got to the roof, where we leaned against the flagpole at the top of the place and lit one up."



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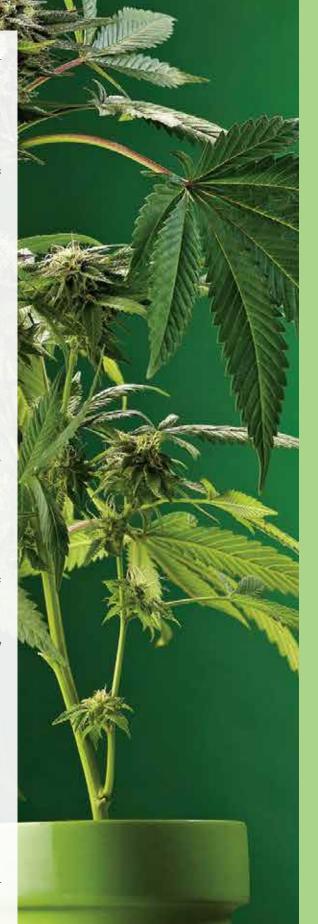
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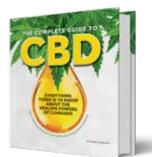
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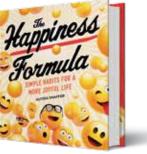
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