

CBD

The Gateway Herb to
Plant-Based Wellness



CBD



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Plant-Based Wellness

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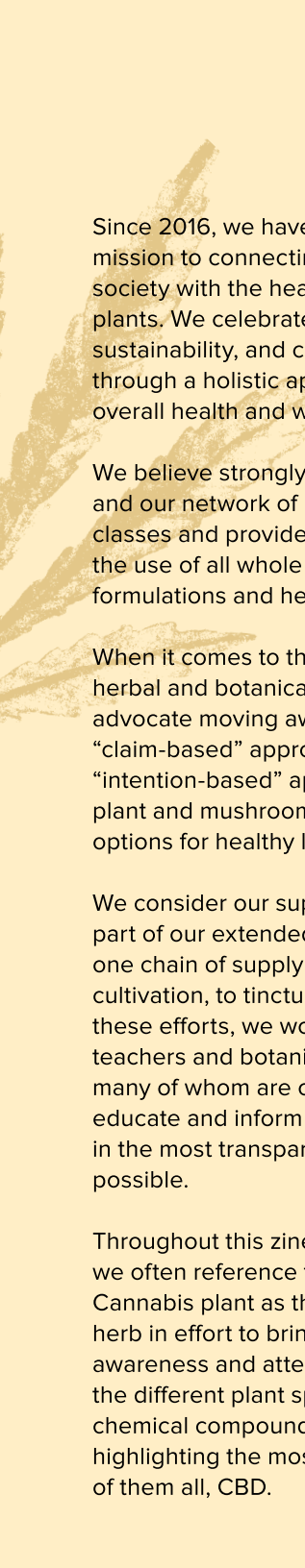
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An Introduction to CBD

By The Alchemist's Kitchen

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Since 2016, we have dedicated our mission to connecting modern society with the healing power of plants. We celebrate artisanship, sustainability, and conscious living through a holistic approach to overall health and wellness.

We believe strongly in education and our network of herbalists host classes and provide instruction on the use of all whole plant formulations and herbal remedies.

When it comes to the power of herbal and botanical remedies, we advocate moving away from a “claim-based” approach to an “intention-based” approach where plant and mushroom health create options for healthy living.

We consider our suppliers to be part of our extended family, creating one chain of supply from seed, to cultivation, to tincture. Through these efforts, we work closely with teachers and botanical experts, many of whom are our suppliers, to educate and inform our community in the most transparent way possible.

Throughout this zine, you will notice we often reference the whole Cannabis plant as the main healing herb in effort to bring more awareness and attention to all of the different plant species and chemical compounds, currently highlighting the most mainstream of them all, CBD.

Cannabis, like many sacred herbs, has been an ancient form of medicine within many indigenous cultures for centuries. Today, Western society is taking a second look at the healing benefits of Cannabis, a socially and politically controversial plant, using advanced technology to provide more scientific research around each individual compound. We applaud and support the need for more research.

The Cannabis industry is rapidly changing and it can be challenging, and at times overwhelming, to keep up with a dizzying amount of information.

We invite you to approach our zine as an entryway into the world of CBD. This first edition is just the tip of the iceberg for this extensive subject and we hope that you close the last page with some newly gained information, easy ways to incorporate Cannabis into your daily rituals, and learn more about some herbal allies that go great with CBD.

There’s a lot still to be learned about this beautiful plant and we are excited to be part of a more cannabis-friendly future.

Thanks for joining us,

The Alchemist’s Kitchen

CBD in Three Parts

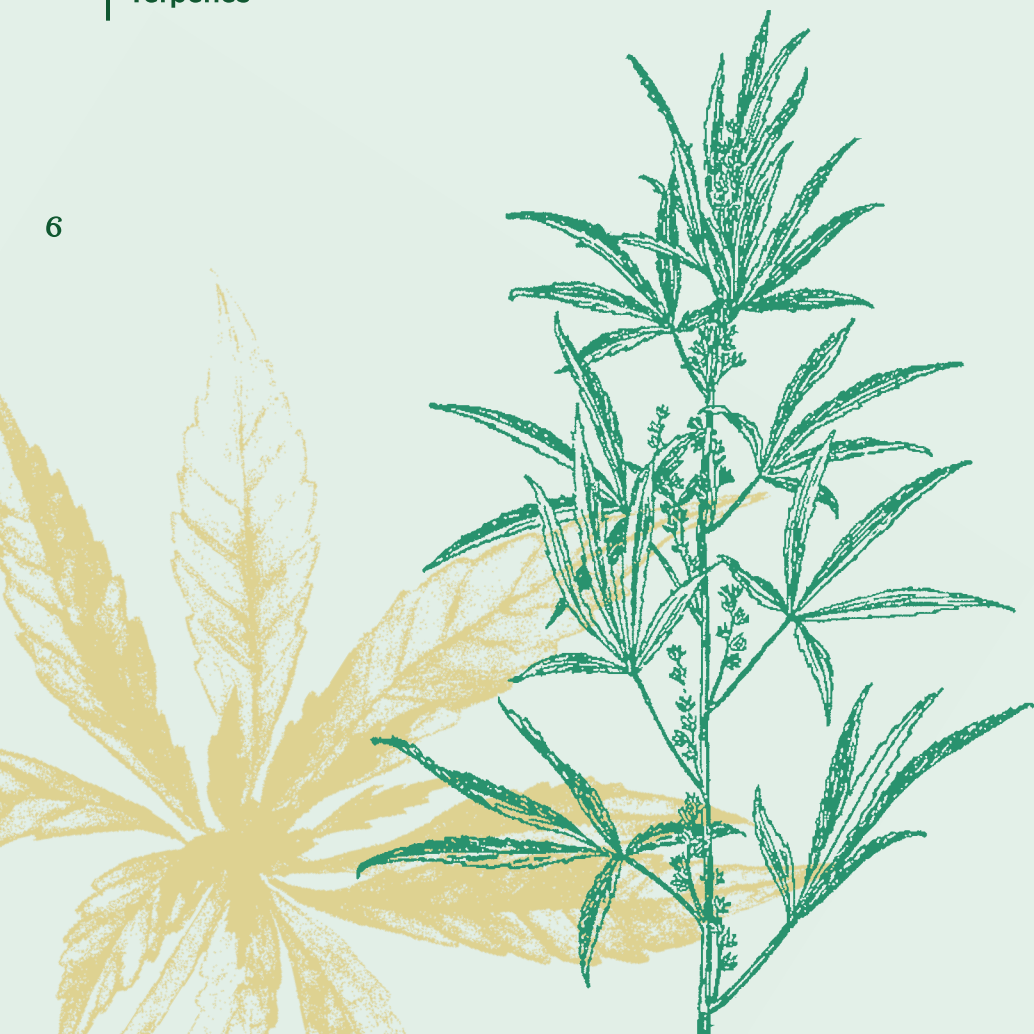
By Zachary Clancy

CBD 101

Cannabinoids—The Other
Compounds Found in Cannabis

Terpenes

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CBD 101

CBD is an acronym for Cannabidiol (canna-bi-diol.)

This is the technical word for a molecule, or phytochemical compound, most commonly found in the Cannabis plant. This little molecule is being studied as an excellent alternative medicine for a variety of sprawling issues in the body with minimally known negative side effects when compared to prescription pharmaceuticals.

For example, it may be a considerable alternative to pharmaceuticals like:

- analgesics (painkillers)
- antidepressants
- anti-inflammatories
- anxiolytics and benzodiazepines (common anti-anxiety drugs)

And is generally considered an effective remedy for conditions such as:

- anxiety
- stress
- inflammation
- neuropathic pain
- depression

It is also considered an antioxidant, neuroprotective, and most recently studied as a phytochemical, plant-derived chemical that can be used to supplement nutrients in the body in order to promote safe, effective and efficient treatment options for many common ailments.

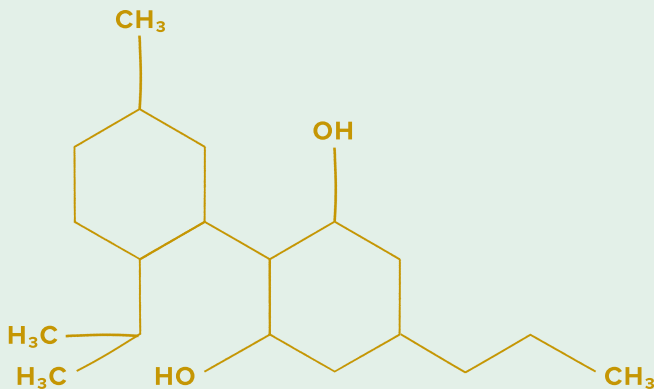
In fact, the US Department of Health and Human Services received a patent (Patent # US09674028 Grant # US6630507B1) on it in 1999 because of these profound benefits.

We should be paying attention to the evolution of CBD and Cannabis research for both personal, political, and societal reasons.

On an individual level, CBD can be used as a natural antidote for many common ailments or simply as a preventative in one's overall wellness routine.

On a societal level, the whole Cannabis plant is often viewed as a human rights issue when considering those incarcerated for Marijuana-related offenses. Despite our government's research-backed knowledge of its medical value for over 2 decades.

If you are looking to become more involved, here are some organizations that you can familiarize yourself with in order to contribute to legislative efforts to deregulate, decriminalize, and even legalize Cannabis nationwide: [Drug Policy Alliance](#), and the [Bowery Cannabis Club](#) for general enthusiasts.



Cannabinoids—The Other Compounds Found in Cannabis

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Cannabis is a creative and generous plant. We say “creative” because of its ability to assemble a bountiful array of complex molecular arrangements. We classify these chemical compounds as cannabinoids.

In addition to CBD, some of the most well-known cannabinoids include:

THC	THCA
CBD	CBDA
CBG	CBN
CBC	CBT
CBV	CBDV
CBGV	THCV
Δ8-THC	

Over 100 unique phytocannabinoids have been discovered in the cannabis plant to date. When we think of all the medicinal benefits Cannabis provides us, THC and CBD tend to currently dominate the discussion as both have been extensively studied and have proven to be effective remedies for a variety of different health issues.

That being said, CBG is emerging as a potential treatment for specifically targeted cancers and CBN is now being studied to help support insomnia and relaxation.

This demonstrates the generous trait of the plant because many, if not all of these cannabinoids, have purported medicinal benefits for pretty much ALL forms of life. Not just humans.

The majority of 'higher' life forms on this planet have some form of system that utilizes these compounds for the purpose of regulating and maintaining the proper balance among all other major systems in the body. This common system is called the Endocannabinoid System (ECS)¹.

The ECS interacts with the Central Nervous system, the Immune System, the Endocrine System, and the Digestive System. It helps us deal with stress and pain.

As humans, we produce our own endocannabinoids that help send messages to different parts of the mind and body:

- Arachidonylethanolamine (*Anandamide—stemmed from the Sanskrit word ananda, which means “joy, bliss, delight”*)
- 2-Arachidonoylglycerol (2-AG)
- N-Arachidonoyl dopamine (NADA)
- 2-Arachidonoyl glyceryl ether (Noladin Ether)
- Virodhamine (OAE)
- Lysophosphatidylinositol (LPI)

All very fun to pronounce out loud!

Cannabinoids are not solely unique to Cannabis and have been found in other herbs and plants. Helichrysum Umbraculigerum is an indigenous South African plant from the Daisy family that has been found to produce CBG. Even Common Echinacea produces similar cannabinoid-like compounds.

To put this in greater perspective, these ancient molecules and systems predate not only us and Cannabis, but most other living plants and creatures by millions (if not hundreds of millions) of years.

Pretty cool, huh?

Let us take a moment to be grateful for this multifaceted and multi-purpose plant. With more research and education, we will soon realize we are only at the beginning of discovering the great medicinal and therapeutic potential of cannabis for a variety of different health issues.

GET TO KNOW YOUR TERPENES



TERPENE
B-MYRCENE

SOURCE
HOPS
MANGO

AROMA
HERBAL
MUSK

EFFECTS
ANALGESIC
SEDATING
MUSCLE RELAXANT
HYPNOTIC



TERPENE
A-PINENE

SOURCE
PINE
NEEDLES

AROMA
PINE
BIRCH

EFFECTS
ANTI-INFLAMMATORY
BOOSTS ENERGY
IMPROVES FOCUS
& MEMORY



TERPENE
B-CARYOPHYLLENE

SOURCE
PEPPER
GINSENG

AROMA
PEPPERY
EARTH

EFFECTS
PAIN RELIEF
ANTI-INFLAMMATORY
APPETITE SUPPRESSANT
ANTI-TUMOR



TERPENE
D-LIMOLENE

SOURCE
CITRUS
FRUIT

AROMA
CITRUS
LEMON

EFFECTS
MOOD ENHANCING
AWAKENING
ANTI-DEPRESSANT
RELIEVES NAUSEA



TERPENE
D-LINALOOL

SOURCE
LAVENDER

AROMA
FLORAL
SWEET

EFFECTS
ANTI-ANXIETY
PROMOTES SLEEP
SEDATIVE
PAIN RELIEF
ANTI-MICROBIAL



TERPENE
NEROLIDOL

SOURCE
JASMINE
GINGER

AROMA
EARTHY
LEAFY

EFFECTS
RELAXATION
ANTI-BACTERIAL
SKIN PENETRANT
ANTI-FUNGAL



TERPENE
EUGENOL

SOURCE
TULSI
CLOVE

AROMA
SPICY
WOODY

EFFECTS
LOCAL ANAESTHETIC
FIGHTS INFECTION
STABILIZES HEARTBEAT



TERPENE
PHYTOL

SOURCE
GREEN TEA

AROMA
MILD
EARTHY

EFFECTS
GABA INHIBITION
ANTIOXIDANT
REDUCES PAIN
PREVENTS VITAMIN
A TERATOGENESIS

Terpenes

Your dog's sense of smell is remarkable. Yours, not so much. However, terpenes are one of the things we are exceptionally good at smelling.

When you squeeze a lime, pinch a juniper leaf, or flip the switch on your lavender scented diffuser, you are sensing terpenes.

Cannabis makes over 200 terpenes. Terpenes help to enrich the aroma and flavor experience of the plant.

They are gaining attention due to the focus of the “entourage effect,” which proposes the therapeutic benefits of cannabis improved by the addition of multiple cannabinoids and terpenes compared to single cannabinoids on their own in full spectrum strains.

They lift or lighten moods, invoke forgotten memories. They inspire smiles, and sneezes, and they also have additional benefits not entirely unlike Cannabinoids.

Additionally, they can help potentiate the effects of other herbal constituents.

Terpenes are actually what give Cannabis the variety of its unique flavor profiles, and all the amusing varietal names:

- Blueberry
- Blueberry Cheesecake
- Cheese
- Cheese Dog
- Crouching Tiger
- Hidden Alien
- Lemon Haze
- Mandarin Haze
- Pineapple Kush
- Pineapple Punch
- Pineapple Skunk
- Skunk
- Mango Skunk
- Fraggie Skunk
- & 600+ more skunk varieties...

CBD: The Gateway to Plant-Based Wellness

By Micaela Foley



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Everyone's heard the cautionary tale of Cannabis. It seems innocent enough to dabble with smoking a little "marijuana" but quickly, the "devil's lettuce" will entice you down a road that leads to hard drugs, crime, and addiction. However, this is propaganda put in place and perpetuated by racist and profit driven government programs and ideology.

In the Western world, Cannabis use was once common in "high society" in the mid-late 1800s before it was stigmatized. Today, we're seeing a resurgence in interest in Cannabis as there's an increasing percentage of the mainstream (largely white, upper-middle class) population using Cannabis medicine for health and wellness, for conditions ranging from anxiety to chronic pain to cancer. We're finally beginning to understand Cannabis for the healing plant it is, rather than the "gateway drug" it's been considered.

Once we experience the healing capabilities of Cannabis, either for ourselves or through a loved one, we are reminded that plant medicine is the medicine of our bodies and souls. We see that herbs are gentle, powerful, and compatible no matter what the ailment. When we use plants and herbs to heal ourselves, we heal more deeply and expansively than just in the physical realm.

CBD is especially useful for those of us who would like to experience the magic of Cannabis healing without any psychotropic effects. CBD, or Cannabidiol, is a compound found in cannabis or hemp plants (which refer to essentially the same plant, with differing ratios of CBD and THC. It's the THC, or delta-9-tetrahydrocannabinol, that causes a change of mental state and awareness. CBD, on the other hand, does not cause "highness." CBD is potently anti-inflammatory and anti-anxiety, and works to relax the body and psyche so that true healing can take place.

CBD SOURCED FROM HEMP VS. MARIJUANA

CANNABIS SATIVA

A plant family that is commonly categorized into two main species—Hemp and Marijuana. As we now know, CBD is a cannabinoid and can be found in the entire Cannabis plant and thus sourced from either species, depending on the strain.

HEMP

Hemp is primarily used for industrial purposes, producing hundreds of resources such as textiles, seeds, food, and oils.

CBD sourced from hemp is non-intoxicating, non-psychoactive and is now federally legal in the US as long as the cannabinoid content of THC is 0.3% or less.

Hemp seed oil, doesn't necessarily contain CBD, and it's important to carefully read labels on products marketed for their therapeutic benefits.

MARIJUANA

Marijuana is most commonly known and grown for its psychoactive properties due to higher concentrations of THC, whether it be for recreational or medicinal use.

CBD found in marijuana species is only sold in recreationally or medicinal cannabis friendly states through dispensaries as it is often combined with THC contents higher than 0.3%, usually ranging 15-20% in concentration.

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Now that we're recognizing Cannabis for what it is—a plant with great healing potential that's been exploited, condemned, misunderstood and feared—some of the racist, capitalist stigma is starting to be dismantled. This stigma began in the early 1900s by Harry Anslinger and the "Reefer Madness" era propaganda which began to successfully equate drugs and crime with People of Color (POC) and immigrants (specifically Mexicans, due to increased immigration during the Mexican Revolution, when the term "marijuana" was coined in order

to make Cannabis sound more foreign and insidious). This stigma was perpetuated by the Reagan era "War on Drugs" campaign in the 80s. Even today, POC are 4–5 times more likely to be arrested, convicted, and incarcerated for possession of Cannabis.

It's time to heal both ourselves and the traumatic history of Cannabis, and to celebrate it for the portal it truly is—one that's re-opened our minds to the healing capabilities and deep potential of the natural world around us.

CBD Dosing

Dosing with CBD is different for every body; as with most herbal remedies, there's no one-size-fits-all recommendation, especially as there are many variables to take into consideration, such as usage, weight, genetics, environment, metabolism, product consistency/potency, and symptoms/ailments. Generally, it's a good idea to "start low and go slow" to find your ideal dose. If using CBD for mild-moderate inflammation and/or stress and anxiety, 5 milligrams (mg) 2-3 times per day is a good place to start. This dose may be sufficient, but can easily be increased to 10 mg if no improvement is felt or seen after 1-2 week(s). Increase the dose in increments of 5 mg until relief is felt. This method can be used for most people beginning to use CBD, unless dealing with acute and/or severe conditions.

Carefully reading the label on each CBD product is very important—make sure you know exactly how many milligrams you're ingesting and keep track of your dosing and symptoms. The only way to find your ideal dose is by tuning into your body and its needs. There is an inordinate amount of misplaced trust in Western doctors to correctly diagnose disease and prescribe medicine. For example, there are over 12 million cases of reported misdiagnosis in the US each year. Our health is largely in our hands.

We know ourselves and our bodies better than anyone else. Making the decision to use CBD and other plant medicines is an empowering one!

The following recommendations have been compiled based on research done by the Mayo Clinic. These are helpful guidelines to follow if you are dealing with more serious medical issues, but again, these are just guidelines, and may not be right for your body or condition:

CHRONIC PAIN: 2.5–20mg of cbd [with or without thc] (orally).

EPILEPSY: 200–300mg of cbd (orally) daily.

MOVEMENT PROBLEMS DUE TO HUNTINGTON'S DISEASE: 10mg of cbd per kg of body weight daily for six weeks (orally).

SLEEP DISORDERS: 40mg–160mg of cbd (orally).

MULTIPLE SCLEROSIS (MS)

SYMPTOMS: cannabis plant extracts containing 2.5–120mg of a thc/cbd combination daily for 2–15 weeks.

SCHIZOPHRENIA: 40–1,280mg oral cbd daily.

GLAUCOMA: a single sublingual cbd dosage of 20–40mg (>40mg may increase eye pressure).

If you have questions or would like input, please consult a local herbalist or holistic practitioner who is familiar with Cannabis medicine.

The Importance of Intention

By Suguna Lorenzo

The first thing we ask customers is, “What is your intention?”

CBD can be used in many different forms and each form delivers relief in different ways. We like to be able to help the customer decide the best way to treat what is ailing them.

The beauty of working with a product like CBD is that the user can develop a personal relationship with the plant and take the power of healing into their own hands. In Western medicine, we are accustomed to strict schedules and specific quantities. There is often a fear of overdosing and the possibility of contra-indication with other drugs.

CBD is much more gentle than your average over the counter pain-relieving drugs. It is very difficult to overdose on CBD.

When macro-dosing CBD daily (over 20mg per day) there are some precautions to take if you are using SSRI antidepressants, high blood pressure, and thyroid medications. This dose of CBD combined with these specific medications can be taxing on the liver.

When treating anxiety and stress, CBD can be taken in micro-doses. Using it on an “as needed” basis is a highly effective method to treat those symptoms. Taking a break every couple of weeks is helpful. It is safe to take CBD over prolonged periods of time and is not addictive. However, your body can build a slight tolerance to it and you might find that you need to increase the amount of your CBD intake if you are not taking any breaks.

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DAILY DOSING

MICRODOSE



0.5mg-20mg

STANDARD DOSE



10mg-100mg

MACRODOSE



100+mg per day

Which Form of CBD is Right For You?

By Micaela Foley



How do you take your CBD? CBD comes in such a variety of forms that it can be overwhelming to know which option is most aligned with your wellness journey. Taking CBD intentionally makes all the difference when considering which effects you'd like to experience.

Certain applications of CBD are more suited to certain ailments in terms of timing, longevity in the body, and local vs. systemic issues.

Even before researching the many embodiments of CBD, it's helpful to start by focusing on your intentions: What are your health goals? How would working with CBD assist you in reaching these goals? Why CBD and what about the long list of potential benefits piqued your interest? What would be your ideal experience be with CBD? In some cases, you'll find one clear choice but multiple applications can be used situationally, too.

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SMOKABLES

If you're drawn to CBD for its ability to quickly soothe stress and anxiety, smoking oil or flower may be your best option.

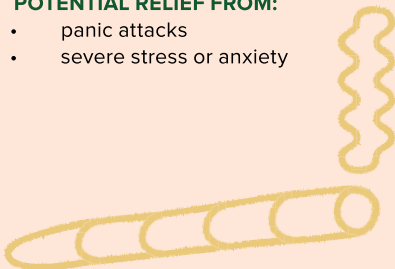
METHOD OF APPLICATION

It's the quickest application method, as the CBD is absorbed into the bloodstream via the lungs almost instantly.

Vaping or smoking is especially effective for those prone to panic attacks or anxiety.

POTENTIAL RELIEF FROM:

- panic attacks
- severe stress or anxiety



LIFESPAN:

While it may be best from a holistic standpoint not to inhale anything besides air into your lungs, smoking CBD has the benefits of being fast acting, quick and easy.

That being said, it does not have a very long life in the body and relief typically only lasts 1-2 hours.

OILS + TINCTURES

Oil and tinctures are the second fastest method of application.



METHOD OF APPLICATION

Often consumed sublingually (under the tongue) and held there for approximately 30 seconds to absorb into the bloodstream through the thin skin.

POTENTIAL RELIEF FROM:

- stress & anxiety
- systemic inflammation
- chronic pain

LIFESPAN:

Depending on metabolism, effects can be felt for 2-4 hours.

TOPICALS

Often made into a salve or balm, CBD oil can also work well topically, when experiencing pain, swelling, or inflammation in a localized area of the body.

METHOD OF APPLICATION

Most often applied directly onto the skin and massaged into the muscle or joint location.



POTENTIAL RELIEF FROM:

- acute inflammation
- localized joint and muscle pain
- skin irritations including redness, acne, eczema

LIFESPAN:

Effects can be felt for 2-3 hours, depending on application and use.

CAPSULES + EDIBLES

Consuming CBD as an ingestible is perhaps the slowest acting form, however, faster is not always better!



METHOD OF APPLICATION

Most edibles come pre-portioned and marked with exact dosage, so they're easy to monitor and consume.

POTENTIAL RELIEF FROM:

- insomnia
- general long term pain
- digestive ailments

LIFESPAN:

When consuming CBD via capsules or edibles, it is more slowly released throughout the body but its effects can be felt for at least 4 and up to 12 hours.

Q&A With the Herbalist



Micaela Foley

We asked one of our resident Herbalists at the Alchemist's Kitchen, Micaela Foley, what questions she hears about CBD the most often!

AK: With the growing interest in CBD, how can herbalists help consumers begin to see Cannabis as a gateway plant to the many other plants and herbal remedies available for health and wellness?

MF: As an herbalist, one of the many exciting things about the increasingly widespread interest in and use of CBD is that people are really reconnecting with the power of plants! Often, folks are surprised to hear me refer to Cannabis as an herb, but that's what it is—it's one herb in a vast pharmacopoeia of plant-based remedies. When people experience relief and healing with CBD, they are of course more open to incorporating other herbs into their lives and routines rather than turning immediately to pharmaceuticals. Cannabis is an herb with a lot of potent teachings, and I believe fostering and strengthening the bond between people and plants is perhaps its most important.

Reversing the idea of Cannabis as a “gateway drug” to Cannabis as a “gateway plant” is a great example of the change in mindset we must adopt if we are to move forward in our collective healing process.

AK: We are hearing more about the terpenes inside the flower of the cannabis plant, what are terpenes and what do they do?

MF: Terpenes are essentially aromatic compounds, produced by many plants and even some insects, for the purposes of deterring predators or attracting pollinators. In the Cannabis plant, terpenes are what gives the flower its scent and flavor profile; over 100 different terpene types have been identified, with each strain of Cannabis boasting a unique composition. Terpenes also interact with other compounds like cannabinoids, altering and enhancing their effects, which provide additional therapeutic benefits. Some terpenes are believed to provide additional relaxation, like Linalool, while some may energize and elevate mood, like Limonene.




AK: For those seeking the advice of an herbalist on the use of CBD, what advice do you have for consumers seeking high quality CBD, and what should consumers watch out for?

MF: First and foremost is source—where is the CBD grown? I recommend looking for US or Canadian grown and processed CBD; local is almost always better. The next question should be: how is it grown? The Cannabis plant is a hyperaccumulator, meaning it sucks up whatever nutrients or compounds are in the soil, which can be great if the soil is high quality, and dangerous if there's chemicals, heavy metals, or synthetic fertilizers being used. Look for companies dedicated to organic and regenerative agricultural growing practices. The third question: what extraction method is being used? Look for products that use a CO2 extract or high quality ethanol extract; stay away from propane, hexane, and butane methods. I also look for products containing a “full

spectrum” or “whole plant” extract, information usually listed right on the label. Remember those terpenes? A full spectrum extract contains terpenes, flavonoids, and other cannabinoids that are generally believed to work synergistically with CBD, making the benefits exponentially higher than a CBD extract alone. The last two things I look for are 3rd party testing to make sure the claims they make are true (usually available on the website or by request of the manufacturer), and evidence that the company is giving back to the community and land its using in some way—this could look like sliding scale for underpaid folks; discounts for cancer patients, the differently abled, and veterans; giving a portion of proceeds to charitable organizations; and/or practicing regenerative agriculture. Vote with your dollar!

And always feel empowered to ask the questions and do the research before investing in CBD product.

A Morning Beverage with Plant Alchemy Water-Soluble CBD



By Raisa Tolchinsky

Something we discuss often here at Alchemist's Kitchen is how to incorporate acts of self-care and the power of plants into daily routine. Most of us drink coffee or tea in the morning, or some form of adaptogenic latte (made with Ashwagandha or Anandamide). Lately, we've been adding Plant Alchemy's newly formulated Water Soluble CBD to our morning potion. Water Soluble CBD is highly bioavailable, and intended for relaxation and relief from everyday stress—(tax season, hello!) Full spectrum CBD oil is extracted and emulsified into super tiny Hydro-PCR CBD droplets, meaning faster absorption into the bloodstream. The active impact of water soluble CBD within the body is estimated to be 3 to 4 times greater than other hemp-derived forms of CBD.

By enhancing the beverages you already drink without disrupting the taste, it is easily incorporated into your daily routine. Below is a morning beverage and ritual (although it is a lovely beverage for the afternoon as well).

BLEND TOGETHER:

1 cup of brewed coffee
(or tea if you'd rather)

1 teaspoon Anandamide or other adaptogen, which is any plant or herb that supports your adrenal system. *Adaptogens help balance your hormones and stress response on a day to day basis— they help the body to “adapt.”*

5–6 drops of Plant Alchemy Water Soluble CBD (Each drop is equal to 1 mg of active CBD. It is generally recommended to add 5 to 6 drops, or 5 mg to 6 mg for a 10 oz. to 12 oz. beverage serving. The body chemistry of each person is always different, and results from dosage will vary from person to person)

1 teaspoon coconut oil or ghee

Dash of cinnamon

Sprinkle of sea-salt

If you can make the time, slow down and sip your drink slowly, while thinking of gratitude and compassion. Pulling a tarot card, journaling, or reading a few pages of a favorite novel are some wonderful ways to infuse your drink with even more intention.

3 Ways to Invite Cannabis Into Your Nighttime Self-Care Routine

By Bowery Cannabis Club

The Bowery Cannabis Club was founded in 2016 to connect the growing cannabis community members with each other, and to provide the highest quality information, experiences, and products.

The BCC was one of the first New York based organizations to provide camaraderie, education, events, and CBD-based products. We are uncompromising with quality but also value hospitality, and ensuring all BCC Members have access to experts/professionals, each other, and safe + fun places to gather. Though growing daily, BCC is a family, which can be felt at every one of our gatherings.

After being a pivotal player in the cannabis conversation as it's gained widespread appeal, BCC has since evolved into a network of resources —offering content/information, events, and products from partners we love + trust. BCC Members receive exclusive discounts and perks to support their understanding and use of cannabis for healthier, more holistically plant-powered lifestyles.

By now we all know that Cannabis has the potential to make us our most calm, cool, and collected selves. Something else that's incredibly effective in allowing us to function at our best is how we wind down. It's all too easy to let the screens and stressors of the day follow us right to our pillow (which should make poor sleep or waking up in a state of stress come as no surprise). It's important that we give ourselves the authority to prioritize shutting it all down and hitting the reset button.

It's crucial to give our bodies and minds a break from the stimulation of the day, and an opportunity to rest before we sleep so that we can actually, well... rest. Taking time to shake off the day allows you to show up ready to take on the next one. Making time in the evening to recalibrate is one of the kindest things you can do for yourself and Cannabis is a perfect aid in doing so. Cannabis can help us better manage stress by balancing the endocannabinoid system, allowing us to relax overall, and potentially sleep better. Since everybody is unique, we had some of our friends share their favorite ways to incorporate Cannabis into their nighttime rituals.

1. Apply a CBD Topical After Bathing

By Micaela Foley, Resident Herbalist at The Alchemist's Kitchen

My favorite way to incorporate CBD into everyday life is by using it topically, after showering or taking a bath at the end of my day. Once I've toweled off, before dressing, I take a little CBD salve (a little goes a long, long way) and massage myself with it, taking my time and focusing on joints and other stiff or painful areas. It's especially helpful in the winter, when my muscles are tighter and my skin is dry. This ritual allows me to tune into and connect with my body; much of my stress is somatic and I tend to carry tension in certain places without realizing it (the Cool Soothe Balm by Plant Alchemy is excellent for relieving that). Upon completion, I feel lighter, relaxed, more aware of my physical and emotional state. It's like I've introduced my heart and mind to my body all over again.

2. Add CBD to Your Evening Elixir

By Rachelle Robinett, Founding Sister of BCC and Founder of Supernatural

I'm a very high-energy human and often very wound-up by the time my days end. My favorite herbs have always been those for peace, calm, and sleep. While CBD affects some folks that way, I find the oil to be quite energizing (and often use it before a long run). However, Plant Alchemy's Water-soluble CBD, is quickly and deeply sedating for me. I need far less of it and feel the effects right away. For that reason, I don't use it during the day, but have come to love it for nights when I really need some help winding down. I always use it in combination with other herbs because I feel strongly that while cannabis is an excellent plant-remedy for a lot of people, it's just one of so many herbs that work wonders.

3. Try Cannabis Instead of a Nightcap

By Kate Miller, CEO of Miss Grass

Balancing both business and life is stressful. My days can feel non-stop, running from meetings to calls to emails. My nighttime ritual is so important to my mental health. It's my time to detach from my phone, my emails, my to-do list and turn inward. It's my nightly reset. And it very much involves cannabis. This can look a bit different from night to night, but for the most part it includes a joint. Lately I've been loving a 1:1 THC to CBD pre-roll to help me slow down, settle in, and as a conscious shifting tool. It's my time to reflect, and most often I do my best brainstorming and creative thinking during this time. I've come up with new business ideas, problem-solved what felt like complex issues earlier in the day, reflected on and learned things about myself and others, let go of the day's stresses, and the list goes on..

If THC isn't your thing, you can sub a CBD vape (loving Beboe's) in for the joint.

Evening Get-Down Elixir Recipe:

By Rachele Robinett, Founding Sister of BCC and Founder of Supernatural

6–8oz hot water

Herbal tea of choice.

(I recommend a blend of a couple nervines (nervous system soothing herbs) simmered on the stovetop for about 10 minutes. My favorites include: lavender, skullcap, oatstraw, passionflower, rose petals, and chamomile.)

5–7 drops Plant Alchemy water soluble CBD

Optional: Add cinnamon, clove, or anise to simmering tea for a warming winter version. Add a finger of fresh ginger or scoop of turmeric for immune support. Add a dash of coconut oil or mana and blend for a creamier elixir. Sweeten with a touch of honey or maple syrup if needed.

CBD and Bioavailability: Why Does It Matter?

By Raisa Tolchinsky



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A trending topic you may have heard about while discussing CBD is “bioavailability,” which the American Heritage Medical Dictionary defines as, “the degree to which a drug or other substance becomes available to the target tissue after administration.” But what does that mean, exactly, and why does bioavailability matter?

According to CBD Origin’s Aaron Cadena, we can think about bioavailability of CBD as “the degree and rate it is absorbed into the bloodstream.” The route of administration is crucial because it influences the uptake, distribution, and elimination of the CBD compound in your body. This is essential because the more bioavailable a CBD product is, the lower the dosage you need to produce the desired effect (reduction of pain, inflammation, or anxiety, for example). In order for CBD to work, it must interact with CB2 cannabinoid receptors (located all around the body), as well as non-cannabinoid receptors, such as the vanilloid receptor TRPV-1 and the serotonin receptor 5-HT1A. (cannahealth.org)

There are 2 main types of receptors: CB1 and CB2. Cannabinoid Receptor 1 (CB1) receptors are mostly located in the brain and nervous system, as well as in the lungs, liver, and kidneys. Our natural endocannabinoids and the cannabinoid THC mainly bind with CB1, due to their similar molecular structure. This may help with pain, nausea and depression. Meanwhile, Cannabinoid Receptor 2 (CB2) receptors are found in the immune system, with a heavy concentration in the spleen and in the gastrointestinal system. CB2 receptors—which bind best with the endocannabinoid 2-AG and cannabis’ CBD—are involved in theregulation of appetite, immune system functions like inflammation, and pain management. (<https://www.greenrelief.ca/blog/cannabinoid-receptors/>)

The most direct route of CBD would be through an intravenous injection, but most consider sticking themselves with a needle messy, painful, and overall unpleasant.

One popular option of taking CBD is through oral consumption (gummies, baked goods, and mints.). In the multiple studies conducted so far, the most optimistic rate of bioavailability was around 20%, which means if you take 100 mg

Brain (CB1)

- Reduces anxiety
- Antidepressant
- Mood Stabilizer

Eyes (CB1 & CB2)

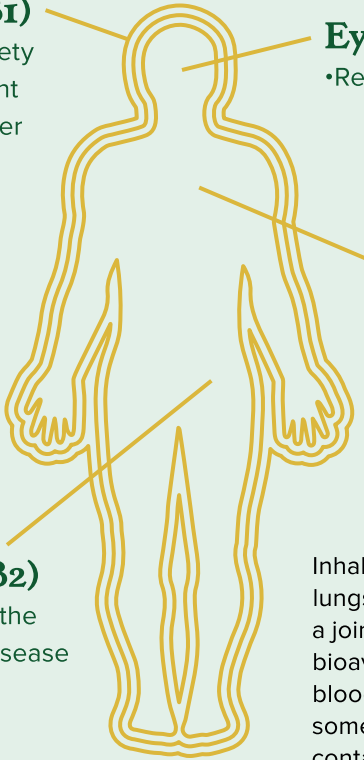
- Reduces vascular tension

Heart (CB1 & CB2)

- Anti-inflammatory
- Prevents plaque buildup

Liver (CB2)

- May reduce the risk of liver disease



Inhaling CBD directly into the lungs, in the form of a vaporizer or a joint, has an extremely effective bioavailability rate. CBD enters the bloodstream much quicker than something like a chocolate bar containing CBD. According to CBD Origin's article, some studies report a bioavailability rate of up to 56 mg (56 mg absorbed for every 100 mg taken).

Understanding bioavailability's relationship to CBD is crucial because it allows you to decide what elements of a product are important to you. If you are looking for a fun or easy way to take CBD, then something like a CBD gummy, mint, or chocolate may be the way to go. But if you're looking for the most cost-effective method to get a desired effect (such as relaxation or decreased anxiety), you may want to invest in something like a sublingual oil or vaporizer. This knowledge can reduce overspending on methods of CBD with low bioavailability, and help you take your healing into your own hands.

of CBD (a very high dosage), you would only be absorbing about 20 mg. This is clearly not the most effective way of dosing. However, edibles have their benefits: they can be fun and easy to consume, and might be a good place to start for those looking to dip their toes into the CBD world.

Sublingual consumption is one way to improve the bioavailability of CBD. The sublingual gland, located underneath the tongue, is a direct pathway to the bloodstream. Sublingual CBD tinctures, like our Plant Alchemy CBD Concentrate, maintain a higher bioavailability. Instead of having to move through the whole digestive system, they are only mildly degraded by the enzymes in saliva.

CBD and Its Herbal Allies



By **Rachelle Robinett**

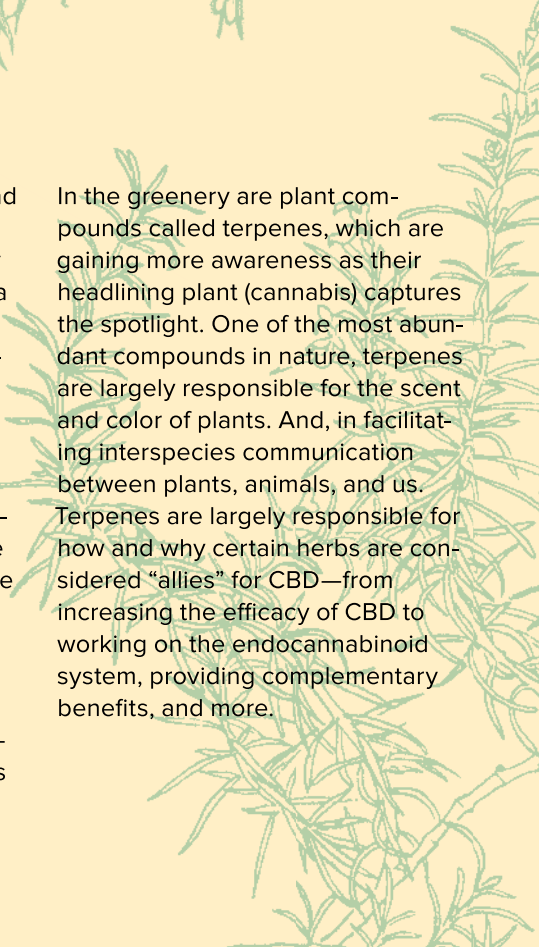
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As a Holistic Health Practitioner and Herbalist, I face an unpredictable variety of needs from clients every day. This requires that I work with a multitude of plant remedies, which includes herbs, nutrition, and environmental inputs.

As a consultant for businesses in the wellness space, I'm often privy to trends before they become popular, and became well aware of the expectations for CBD's fame before it hit.

As a reverent student of nature—and I know I speak for other plant-based practitioners in saying this—I hope that CBD's popularity allows it to not only help heal, but also to open more minds to the world of plant-based remedies. It is dense and immense!

In the greenery are plant compounds called terpenes, which are gaining more awareness as their headlining plant (cannabis) captures the spotlight. One of the most abundant compounds in nature, terpenes are largely responsible for the scent and color of plants. And, in facilitating interspecies communication between plants, animals, and us. Terpenes are largely responsible for how and why certain herbs are considered "allies" for CBD—from increasing the efficacy of CBD to working on the endocannabinoid system, providing complementary benefits, and more.



Herbal Allies to CBD

A PLANT-BASED DIET

Not what you expected to hear first? Gotcha! If you know me, you know that this is where I always start, because it's where we might all begin. As exciting and full of potential that CBD is, it's still no match for first right nutrition, enough sleep, movement, and some mindfulness. With those in place, it and the other plant allies here can fully serve you.

LAVENDER

Lavender contains the aromatic terpene linalool, which may potentiate the pain-reducing and muscle relaxing effects of cannabis. It's high in nerolidol, a terpene found also in ginger, jasmine, lemongrass, and tea tree. Nerolidol has been shown to be anti-inflammatory, antioxidant, and sedative. Overall, lavender can be a deeply peaceful plant, and works as well with CBD as on its own. Try the two in a topical formula that you can smell for an especially calming experience.

BLACK PEPPER & ROSEMARY

BCP (beta-caryophyllene) is a terpene found in the essential oils of hops, cloves, rosemary and more, and it's a special compound in that it may increase the efficacy of CBD, especially for reducing inflammation. BCP appears to work on receptors throughout the body, including the brain, and when used in the form of rosemary for example, there can be

added benefits of improved circulation and cognitive clarity. I love these plants in digestible forms, though inhaling is one of the fastest ways to get herbal compounds active in our bodies.

ECHINACEA

For immunity, many of us know echinacea. But, less often advertised is its action on the endocannabinoid system. Compounds similar to cannabis in echinacea may target the CB2 receptor and slow enzymes that break down cannabinoids, allowing our CBD to work its magic longer. Echinacea is also an inflammation reducer and antioxidant, with analgesic (pain relieving) properties too. Try it as a long-steeped tea topped with water soluble CBD for a full-system support.

BLACK COHOSH

One of our best herbal assists for hormone support (especially related to menopause), black cohosh can work synergistically with cannabis in a holistic, broadly balancing way. Both plants affect hormone levels via the endocrine system, which is a sort of master regulator for all of our hormones (sex, stress, and sleep). While cannabis/CBD is serving its purpose, black cohosh can help in tandem—taming mood swings, hot flashes, and more. Consider this combination in capsule for potency and consistent dosing.

For more information on Cannabis, CBD, and plant medicine celebrate the power of plants with us on thealchemistskitchen.com

Works Consulted

Taming THC: potential cannabis synergy and phytocannabinoid-terpenoid entourage effects By Ethan B. Russo

Cannabidiol as an Emergent Therapeutic Strategy for Lessening the Impact of Inflammation on Oxidative Stress By George W. Booz

Circulating Endocannabinoids: From Whence Do They Come and Where are They Going? By Cecilia J Hillard

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The Cannabis Health Index: Combining the Science of Medical Marijuana with Mindfulness Techniques To Heal 100 Chronic Symptoms and Diseases
By Uwe Blesching

<https://www.projectcbd.org/science/how-cbd-works>

<https://medium.com/cbd-origin/the-endocannabinoid-system-everything-you-need-to-know-1c38a648cafb>

<https://www.leafly.com/news/cannabis-101/what-is-cannabis-what-are-strains>

<https://www.leafly.com/news/cannabis-101/terpenes-the-flavors-of-cannabis-aromatherapy>

<https://medium.com/cbd-origin/hemp-vs-marijuana-the-difference-explained-a837c51aa8f7>

<https://www.greenrelief.ca/blog/cannabinoid-receptors/>

<https://www.royalqueenseeds.com/blog-bioavailability-the-story-of-how-cannabis-enters-the-body-n943>

<https://www.cannahealth.org/cbd-bioavailability-whats-the-best-way-to-absorb-cbd/>

<https://medium.com/cbd-origin/what-is-cbd-bioavailability-and-why-does-it-matter-69d9a2e37e6c>

Thank you...

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Disclaimer

CBD is not for use by or sale to persons under the age of 18. CBD should be used only as directed on the label. CBD should not be used if you are pregnant or nursing. Consult with a physician before use if you have a serious medical condition or use prescription medications. A Doctor's advice should be sought before using CBD or any supplemental dietary product. All trademarks and copyrights are property of their respective owners and are not affiliated with nor do they endorse CBD. These statements have not been evaluated by the FDA. CBD is not intended to treat, cure or prevent any disease. Void Where Prohibited by Law.



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