NATURE MED DISPENSARY

Cannabasics

SCAN ME

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Welcome to Nature Med!

This booklet is designed to give you a brief rundown on who we are as a company, the history of cannabis use in humans, as well as provide the reader with information about the cannabis plant and how to use it. While there is still an incredible amount that we do not know about the benefits of cannabis due to its continued legal status throughout the world, the goal of this booklet is to give you a condensed version of what the research that has been allowed to be done has shown us.

WHO WE ARE

Nature Med is a company of passionate cannabis advocates dedicated to responsible patient education, and providing those patients with the highest quality medicine available in a professional setting in an effort to improve the community through cannabis.

Cannabis in human history

Cannabis and humans have a relationship dating back into prehistory. Some of the earliest evidence of cannabis use as a sacrament dates back to earlier than 3000 BCE where the flower of the plant was burned as incense. While we find evidence of cannabis use in prehistory it is unfortunately very hard for us to really understand the relationship that our ancestors shared with the plant. However, as we move forward into the time of recorded history we have a window into this ancient plant/human relationship, and how it has developed into what it is today.

China
2737 BCE

Emperor Shen-Nung, known as the Father of Chinese Medicine, was the first person to record medical cannabis use in the Pen Ts'ao. Used for over 100 ailments, he deemed the plant one of the Superior Elixirs of Immortality.

India
2000 BCE-1000 BCE

Cannabis was referred to as one of the 5 essential plants in the Atharva Vedas. It was used as a source of fiber, food, oil, and medicine as well as for recreational and religious and spiritual purposes

Egypt
1550 BCE

Egyptian medical papyrus of medical knowledge, the Ebers Papyrus, prescribes topically administered cannabis for inflammation.

Ancient Middle East
900 BCE

Medical tablets on display at the Louvre give a description of Assyrians using cannabis to create a topical ointment

Ancient Mediterranean
450-200 BCE

Physician Dioscorides prescribed cannabis for toothaches and earaches. Greek doctor Claudius Galen noted it was widely consumed throughout the empire. Women of the Roman elite also used cannabis to alleviate labor pains.

China
207 CE

Hua T'o was the first recorded physician to describe cannabis as an analgesic. He used a mixture of cannabis resin and wine to anesthetize patients before surgery.

Africa
1300 CE

Arab traders bring cannabis from India to Eastern Africa, where it spreads inland, and is used to treat malaria, asthma, fever, and dysentery.

Americas
1500 CE

The Spanish brought cannabis to the Americas, where it was used for more practical purposes like rope or clothes. However, years later, it would be used as a psychoactive and medicinal drug.

Colonial India 1839 CE

After studying indigenous plants in India, Irish doctor, William O'Shaughnessy, introduced the therapeutic uses of cannabis to Western medicine.

United States 1914

Drug use was declared a crime in the U.S. under the Harrison Narcotics Tax Act in 1914.

United States 1937

The Marihuana Tax Act banned the use and sales of cannabis in the United States.

Israel 1964 CE

The molecular structure of THC was discovered and synthesized by Israeli chemist Dr. Raphael Mechoulam.

United States 1970 CE

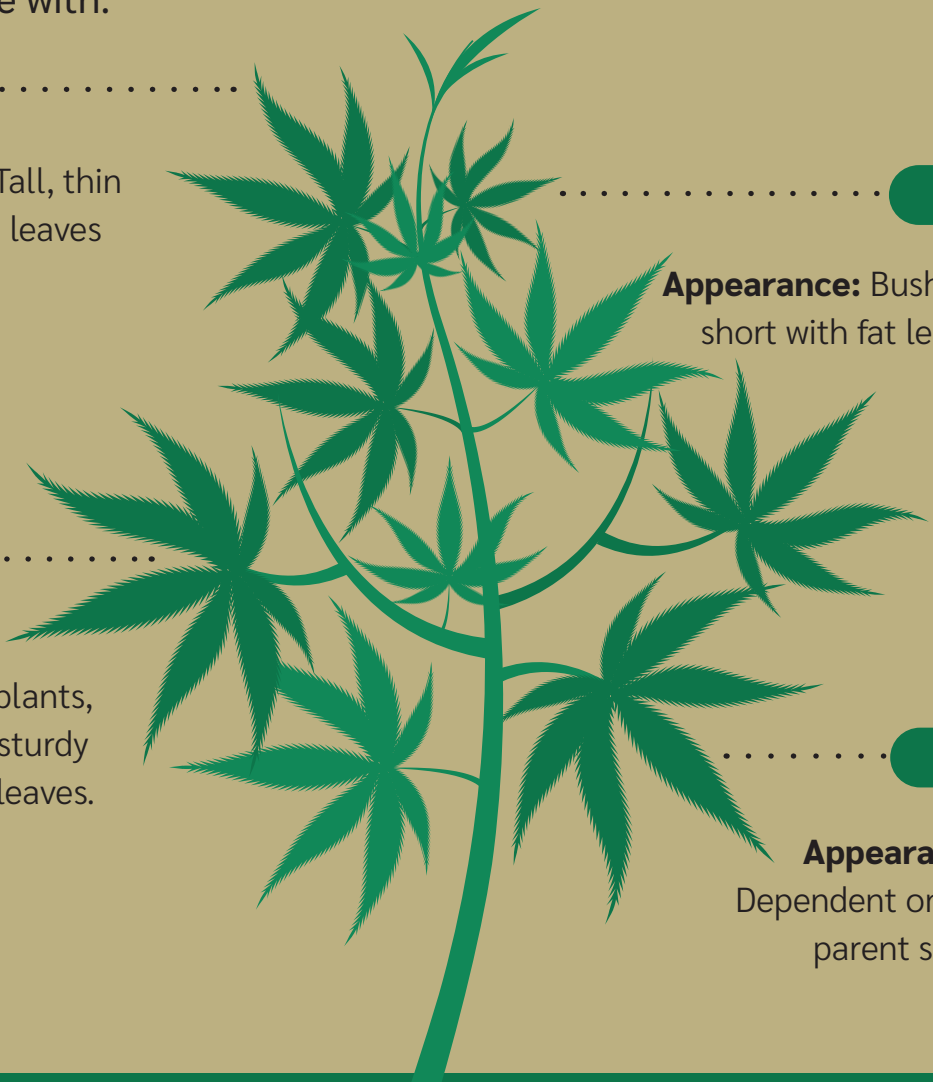
Cannabis became categorized as a Schedule 1 Drug in the U.S., meaning it was listed as having "no accepted medical use." This led to cannabis research becoming next to impossible to do.

St.Louis University 1988 CE

The CB1 and CB2 cannabinoid receptors were discovered right here in Missouri!

Get To Know The Plant

The cannabis plant is a genus of the plant family known as Cannabacea. There are three species of the cannabis genus: cannabis sativa, cannabis indica, and cannabis ruderalis. Cannabis ruderalis (which you may know as “hemp”) is used more for industrial purposes, while cannabis sativa and indica are used medically and recreationaly where legal. A lot of claims have been made about the different effects of indica and sativa strains, however there is little evidence that species alone will determine effect. These words for the most part are best used to determine what the plant itself will look like. It is best to focus on cannabinoid and terpene profile when deciding on which product you want to medicate with.



SATIVA

Appearance: Tall, thin plant with thin leaves

INDICA

Appearance: Bushy & short with fat leaves

RUDERALIS

Appearance: 1 to 2.5 ft tall plants, with thick and sturdy stems and fan leaves.

HYBRID

Appearance: Dependent on the parent strain

NOTABLE SATIVA STRAINS
Super Silver Haze
Sour Diesel • Jack Herer
Strawberry Cough

NOTABLE INDICA STRAINS
Grandaddy Purp
Northern lights • Bubble Kush
Blue Cheese • Purple Kush
Grape Ape • Purple Urkle

NOTABLE HYBRID STRAINS
Blue Dream • GSC • OG Kush
White Widow • Original Glue
Skunk • Chemdog

Cannabinoids

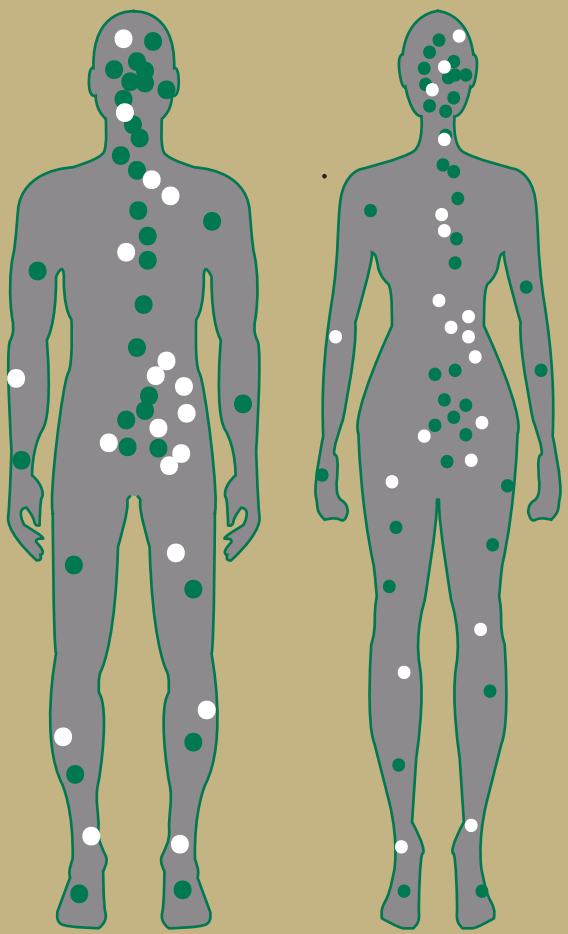
What are they?
What is the endocannabinoid system?

Cannabinoids are chemical compounds contained within the sticky mushroom shaped glands found on the cannabis plant. They are responsible for the many reported benefits of the cannabis plant. Cannabinoids found on the plant (phytocannabinoids) resemble endocannabinoids, compounds our bodies naturally produce to balance and control communication between cells. They do this by binding to receptors found throughout our bodies. This system of receptors is known as the endocannabinoid system (ECS).

What is the endocannabinoid system?

The ECS is made up of CB1 and CB2 receptors found on nerve endings. When cannabis is consumed the phytocannabinoids bind to these receptors by mimicing the endocannabinoids. This then causes the nerve to either fire or not fire. Metaphorically, imagine cannabinoids as keys that unlock various functions in our ECS.





CB1

CB1 receptors are found primarily in the brain and central nervous system. They are also found in lesser amounts in the other tissues throughout the body.

CB2

CB2 receptors are mostly in the perepheral organs especially cells associated with the immune system.

Some common cannabinoids...

THC

TETRAHYDROCANNABINOL

Medical Properties: Analgesic, anti-arthritic, anti-convulsive, antiemetic, anti-epileptic, anti-proliferative, anti-inflammatory, antispasmodic, appetite stimulant, energy support, gastrointestinal relief, sleep support, and stress/anxiety relief

Psychoactive

THCV

TETRAHYDROCANNABIVARIN

Medical Properties: Appetite suppressant, pain reliever, antispasmodic, and anti-inflammatory

Non-Psychoactive

THCA

TETRAHYDROCANNABINOLIC ACID

Medical Properties: Anti-inflammatory, neuroprotective, anti-emetic, anti-proliferative, sleep support, and analgesic

Psychoactive

CBD

CANNABIDIOL

Medical Properties: Analgesic, anti-arthritic, anti-bacterial, anti-convulsive, antiemetic, anti-epileptic, anti-proliferative, anti-inflammatory antispasmodic, blood sugar balancing, gastrointestinal relief, and neuroprotective

Non-Psychoactive

CBDA

CANNABIDIOLIC ACID

Medical Properties: Reduces nausea and inflammation.

Non-Psychoactive

CBC

CANNABICHROMENE

Medical Properties: Analgesic, anti-arthritic, anti-bacterial, anti-convulsive, anti-inflammatory antispasmodic, gastrointestinal relief, immune support, neuroprotective, sleep support, and stress/anxiety relief.

Non-Psychoactive

CBG

CANNABIGEROL

Medical Properties: Reduces intraocular pressure, anti-inflammatory, neuroprotective, and antidepressant

Non-Psychoactive

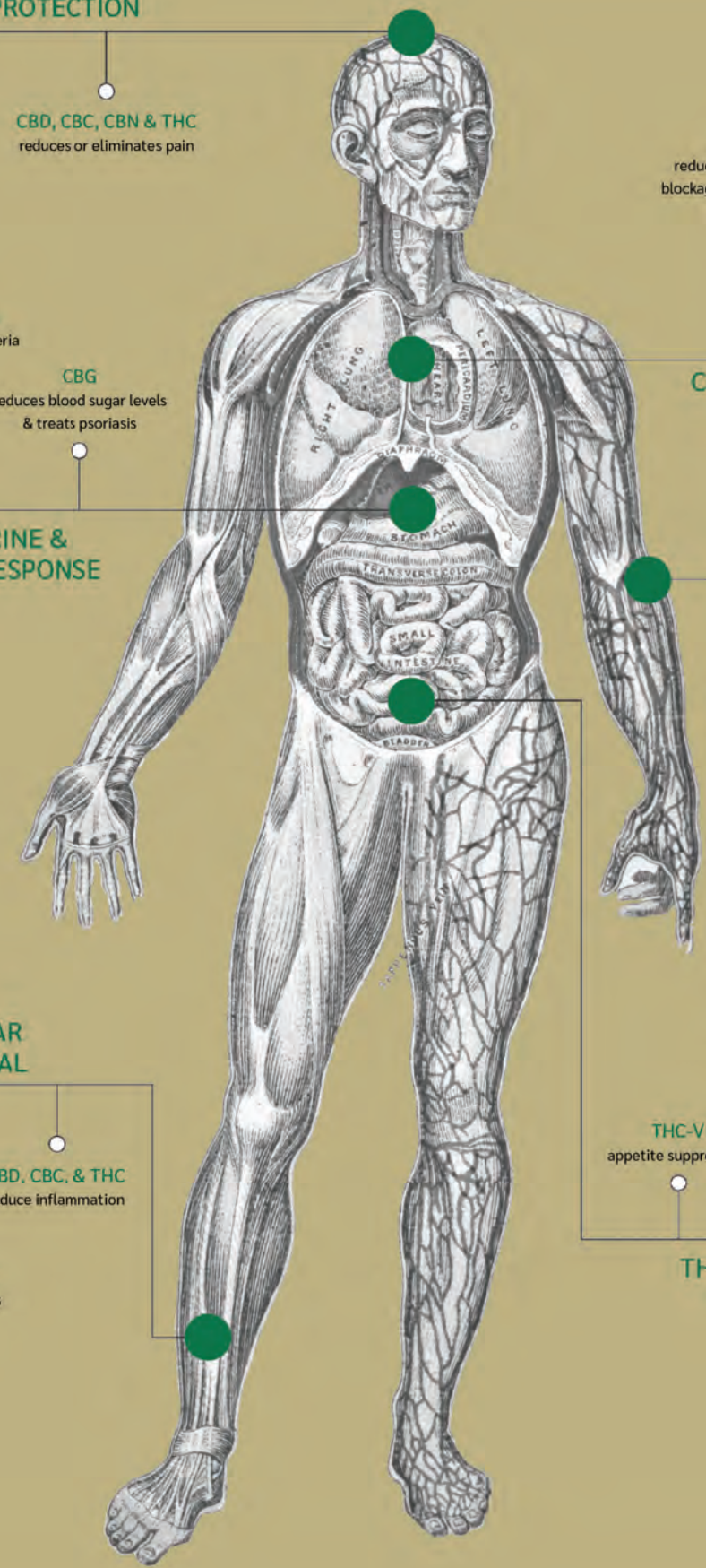
CBN

CANNABINOL

Medical Properties: Analgesic, anti-arthritic, anti-convulsive, antiemetic, anti-epileptic, anti-inflammatory antispasmodic, gastrointestinal relief, immune support, sleep support (in combination with THC), and stress/anxiety relief.

Mildly Psychoactive

Cannabinoids & Your Body



WHOLE BODY RELIEF AND PROTECTION

- **CBD, CBG, CBC & THC** — inhibit cell growth & cancer cell
- **CBD, CBC, CBN & THC** — reduces or eliminates pain

CIRCULATORY SYSTEM

- **CBD** — reduces risk of artery blockage & anti-ischemic
- **CBD & THC** — increases cerebral blood flow

ENDOCRINE & IMMUNE RESPONSE

- **CBD & CBG** — kills or slows bacteria
- **CBG** — treats fungal infections
- **CBG** — reduces blood sugar levels & treats psoriasis

THE NERVOUS SYSTEM

- **CBD** — aids in sleep
- **CBD** — tranquilizes & relieves anxiety
- **CBD & THC-V** — reduces seizures & convulsions

MUSCULAR & SKELETAL

- **CBD, CBG , CBC, & THC-V** — promote bone health
- **CBD. CBC. & THC** — reduce inflammation
- **CBD, CBN, & THC** — suppress muscle spasms

THE DIGESTIVE SYSTEM

- **CBD** — reduces contractions in the small intestines
- **THC-V** — appetite suppressant
- **THC** — appetite stimulant

Terpenes

What are they?
What is the entourage effect?
What is full/broad spectrum?

Terpenes are secreted in the same glands that produce cannabinoids like THC and CBD, terpenes are aromatic oils that color cannabis varieties with distinctive flavors like citrus, berry, mint, and pine. Terpenes play a key role in differentiating the effects of various cannabis strains. Some terpenes might promote relaxation and stress-relief, while others potentially promote focus and acuity.



PINENE

Present in: Pine needles **Aroma:** Pine and Earth
Properties: Anti-inflammatory, anti-bacterial, bronchodilator, and cognitive support

BOILING POINT 211°F



MYRCENE

Present in: Hops **Aroma:** Floral, earthy, and pungent
Properties: Sedative, sleep aid, and muscle relaxant

BOILING POINT 322°F



LIMONENE

Present in: Citrus **Aroma:** Citrus and fresh spice
Properties: Anti-anxiety and treats acid reflux

BOILING POINT 348°F



LINALOOL

Present in: Lavender **Aroma:** Floral and sweet citrus
Properties: Anti-anxiety, anesthetic, anti-convulsive, and analgesic

BOILING POINT 388°F



TERPINOLENE

Present in: Coriander **Aroma:** Piney, floral, herbaceous
Properties: Analgesic, pain reduction, digestive aid, and appetite stimulant

BOILING POINT 366°F

TERPINEOL



Present in: Lilac **Aroma:** Lilac, citrus, and wood
Properties: Calming aid, anti-viral, anti-bacterial, and immune support

BOILING POINT 424°F

CARYOPHYLLENE



Present in: Black Pepper **Aroma:** Spice and citrus
Properties: Anti-inflammatory, analgesic, protects cell walls, and promotes healthy digestion

BOILING POINT 366°F

HUMULENE



Present in: Basil **Aroma:** Robust, earthy, and herbaceous
Properties: Anti-inflammatory, appetite suppressant, anti-fungal, and anti-proliferative

BOILING POINT 222°F

OCIMENE



Present in: Thyme and alfalfa **Aroma:** Sweet and woody
Properties: Decongestant, antiseptic, anti-viral, and bactericidal

BOILING POINT 122°F

NEROLIDOL



Present in: Jasmine **Aroma:** Floral and woody
Properties: Sedative, anti-parasitic, and anti-fungal

BOILING POINT 251°F

GERANIOL



Present in: Roses **Aroma:** Floral and fruity
Properties: Anti-inflammatory, anti-bacterial, antioxidant

BOILING POINT 122°F

What is the entourage effect?

Cannabinoids and terpenes work together to produce the beneficial effects (both physiological and psychological) within the ECS. Interactions of cannabinoids and terpenes within our bodies amplifies or mutes each other's effects. This is referred to as the entourage effect. Limited research has been done to date, however the research available so far has yielded interesting results. For example:

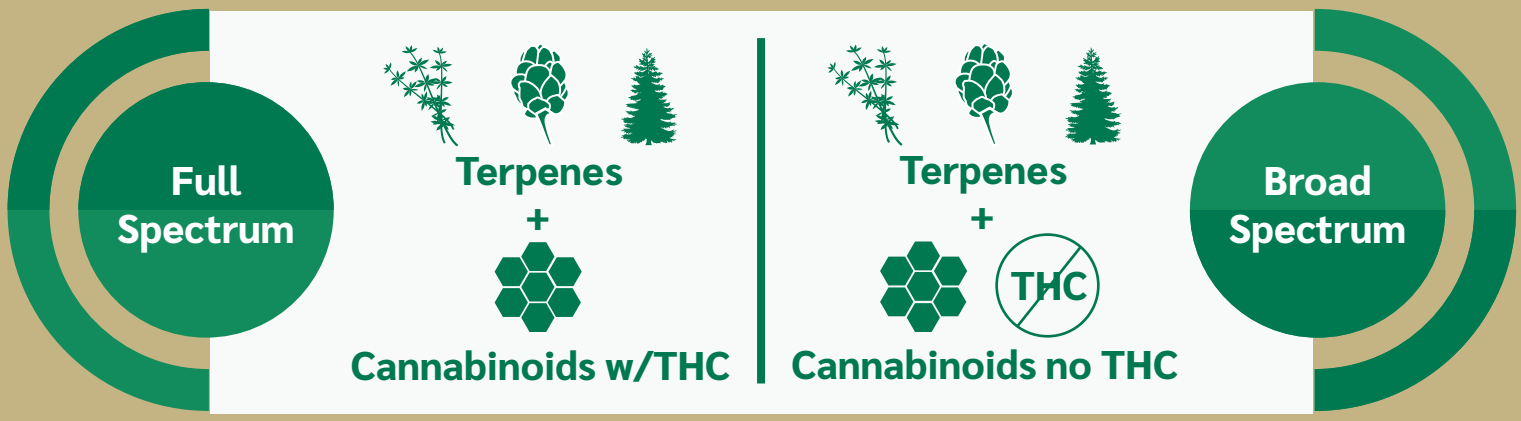
THC in combination with CBN has a largely sedating effect

Myrcene reduces the blood-brain barrier, making it easier for other Cannabinoids to pass through

Linalool and limonene present with CBG treats MRSA

Full-Spectrum vs Broad Spectrum

Cannabis flower certainly contains a wide variety of cannabinoids and terpenes by virtue of being a raw herbal product, but some cannabis extracts also offer a rich diversity of cannabinoids and terpenes. We call these full-spectrum cannabis extracts. You may also see some products labeled as broad-sectrum. This is almost the same as full-spectrum with the exception of THC.



INHALATION

SMOKING

ONSET: Within 10 minutes
DURATION: Usually complete within 2 hours.
TOOLS USED: Pipes, water pipes, blunts & joints

Holding in smoke to increase the effects actually doesn't help absorb cannabinoids. The lightheaded feeling observed with longer holding of breath is attributed to the mix of carbon monoxide and the chemical change from the combustion itself. 95% of THC is absorbed within seconds.

Cannabinoids are highly combustible, so temperature is important to the beneficial parts of the cannabis plant. Terpenes, for example, when fired at high temperatures, are destroyed before they are inhaled. This robs the patient of some of the potential benefits offered through those cannabinoids and terpenes.

VAPORIZING

ONSET: Within 10 minutes
DURATION: 2-3 hours
TYPES OF CONCENTRATES: Shatters, badders/budders, waxes, sauce and rocks, diamonds, crumble, oil, distillate, rosin, bubble hash

Concentrates are a great choice for anyone that is looking for more potency without having to revisit a pipe or any other smoking device as often. Vaporizers are also a much more discreet way to medicate.

ORAL

EDIBLES

ONSET: 30 minutes to 2 hours.
DURATION: Active in your system for 6 hours on average



Start LOW go SLOW. It takes time before any effects will be felt. Wait at least on hour after ingestion before deciding if you need more.



TINCTURES

ONSET: Taken sublingually, rapid onset can occur. Mixed in a beverage it typically takes an hour.
DURATION: About 2 hours on average.



When taken sublingually, tinctures go directly into the bloodstream, making it much quicker than the traditional oral routes. By bypassing the liver, there is quicker absorption and the potency remains unchanged.



CAPSULES

ONSET: 30 minutes to 2 hours
DURATION: Active in system for 6-24 hours depending on formulation



TOPICALS

TOPICALS

ONSET: 20 minutes
DURATION: 1-2 hours
DELIVERY METHODS: Creams, balms, patches, transdermal gels

Typically topicals are not phsychoactive. The terpenes and cannabinoids interact with the cb receptors in the skin resulting in the reported effects.

Where other products are reported to do well in managing overall pain throughout the body, topicals are great for targeted pain relief. If you are someone that uses cannabis products to manage pain you may want to consider supplementing your products with a topical cream.

Pay attention to potency when it comes to purchasing topicals. Some topical products are avaiable (especially in the CBD market) are geared towards a cosmetic consumer instead of medical patients. Its also important to pay attention to cannabinooid profile. Contrary to what many CBD companies want youto think, THC tends to be a better pain reliever overall.

Recognizing Signs of Cannabis Abuse

While most agree that medical marijuana use is not physically addictive, it can be habitually addictive.According to the National Institute on Drug Abuse (NIDA), a study suggests that “marijuana use can lead to a form of addiction in severe cases.” An estimate suggests that around 10% of adults living in the US suffer from drug use disorder at some point in their lives. Due to the habitually addictive potential of cannabis it should be avoided by people with mental health disorders and people under the age of 18.

The 5th edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5) by the American Psychiatric Association states the prevalence of two or more of the following symptoms indicate that a person may be abusing marijuana.

Some signs include

- Losing control of the ability to use the prescribed amount of medical marijuana
- Thinking of trying to cut back on medical marijuana abuse but failing to do so because of addiction
- Experiencing withdrawal symptoms when not using marijuana; the withdrawal symptoms include anxiety, depression, headaches, cravings, sleep disruption, mood swings, weight loss or gain, digestion issues, changes in appetite, nausea and cramps (especially after eating)
- Developing a tolerance for medical marijuana and requiring more and more to achieve the same effects
- Failing to do important things
- Abandoning the things and activities they once enjoyed
- Becoming reclusive and avoiding family events
- Continuing the abuse of medical marijuana even if it is causing relationship and social issues
- Neglecting appearance
- Spending a better part of their day seeking medical marijuana, abusing it, and recovering from its effects

If you or someone you love is struggling from addiction or substance abuse, please contact Substance Abuseand Mental Health Services Administration (SAMHSA) National Helpline @ 1-800-662-4357.

Missouri Cannabis Consumption Laws

While cannabis use for qualified patients is legal in Missouri, it is still illegal to consume cannabis in public. Furthermore, like any other medication with psychoactive effects, it is illegal to consume cannabis and operate a motor vehicle. For more clarification on these two things see the quoted material from the state below:

"Where can I publicly consume medical marijuana?

Per 19 CSR 30-95.030, no qualifying patient shall consume marijuana for medical use in a public place, unless provided by law. 19 CSR 30-95.010 defines a public place as any public or private property, or portion of public or private property, that is open to the general public, including but not limited to, sidewalks, streets, bridges, parks, schools and businesses. See 19 CSR 30-95.010(33) for more information.

Can I consume medical marijuana and drive?

The patient identification card does not offer individuals protections from violating laws pertaining to operating a motorized vehicle while under the influence. Nothing in Article XIV permits a person to operate, navigate, or be in actual physical control of any dangerous device or motor vehicle, aircraft or motorboat while under the influence of marijuana."

Potential Hazards of Cannabis Use

While we do our best to educate our patients as best we can in order to allow them to find the medicine that suites them, not all cannabis experiences are positive. A majority of the time this is due to lack of education, which leads to improper dosage. The low and slow adage does not just apply to edibles. You should use caution always when consuming cannabis. Medicate in microdoses at first in order to find the correct dosage for you and your own personal needs.

Cannabis, like with all medications, should not be mixed with alcohol or other drugs. Consult your physician before using cannabis in addition to any prescription medication you may be taking. Certain cannabinoids and terpenes in the cannabis plant can make prescription drugs either more or less bio-available in the blood stream causing a disruption of the intended dosage of the other prescription. One such group that is vulnerable to this is people on blood pressure medications.

If there is a case where you, a child, a pet, or anyone appears to be having a medical emergency of any kind call Missouri Poinson Control (314) 772-8300 or 911