

A CASE FOR CANNABIS IN TREATING HAIR LOSS

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“HIGH-QUALITY CANNABIDIOL (CBD) USED ON AN INTENDED, CONSISTENT BASIS POSSESSES THE POTENTIAL TO STIMULATE HAIR GROWTH, MAKING IT AN ATTRACTIVE NATURAL ALTERNATIVE FOR TREATING AND PREVENTING HAIR LOSS.”

There I said it. *Now let me explain how, but first a little background.*

Cannabis History (Lasered version)

Cannabis has a long, rich history indigenous to Asia as one of the earliest domesticated crops. It has been used in China for over 8,500 years for both industrial and medicinal uses. Cannabis was introduced to Western Asia and Europe in 2,000-1,000 BCE and was primarily used for fiber. For hundreds of years, hemp fiber was the #1 choice for rope, sailcloth and was vital to the shipping industry during the Industrial Revolution. In 1545 it was introduced to the Spanish Colonies. In 1606, cannabis made its way to North America.

FUN FACTS: In 1619, the Virginia Assembly passed a law that all households had to produce hemp and was accepted as currency in Virginia, Maryland, and Pennsylvania. Thomas Jefferson, James Madison, Benjamin Franklin, and Henry Clay all farmed hemp.

Cannabis has an extensive, fascinating past, but there is not enough time or space here to take a “deep dive”.

The important takeaway is that cannabis is “deeply rooted” in earth’s history to provide raw material and natural medicine. Historically controversial, cannabis has also been used decisively for political and economic posturing, and racially profile certain groups of people.

Fortunately, cannabis is gaining unprecedented recognition in the scientific, medical and spiritual realms for its powerful protective and healing properties.

Hemp vs. Marijuana: What’s the Difference?

A common misconception is that *hemp* and *marijuana* are two separate species of cannabis plants. The truth is that science doesn’t differentiate between the two, but the law does.

Legally, tetrahydrocannabinol (THC) is the distinguishing factor.

The term “hemp” means the cannabis contains .3 percent or less of the THC content by dry weight. Contrary, “marijuana” contains more than .3 percent of the THC by dry weight. THC content can vary among cannabis plants due to genetic breeding, farming methods, extraction method, and intent of use.

Cannabis plants have been designated as cannabis Sativa, cannabis Indica, or a hybrid. Each has its own purported characteristics and effects. For the sake of this article, we will refer to the terms cannabis and hemp (.3 percent or less of THC) interchangeably.

What is Cannabidiol (CBD)?

Cannabidiol (CBD) is a naturally occurring compound found in the resinous flower of *cannabis*, a plant with a rich history as medicine going back thousands of years. A safe, non-addictive substance, CBD is one of more than a hundred “phytocannabinoids,” unique to cannabis and endow the plant with its robust therapeutic profile.

CBD is closely related to another important medicinally active phytocannabinoid: tetrahydrocannabinol (THC), the psychoactive compound which causes the famous “high”.

Both CBD and THC have significant therapeutic attributes. But unlike THC, CBD does not make a person feel “stoned” or intoxicated. That’s because CBD and THC act in different ways on different receptors in the brain and body.

How Can CBD Help?

CBD has so many therapeutic benefits; it’s hard to know where to start. Below, I have highlighted the benefits that directly correlate to hair loss and healthy hair growth.

Providing Restful Sleep and Less Stress

We all live in stressful times in society that can wreak havoc on one's well-being (*understatement of the year!*).

Continuously high levels of stress lead to excessive production of cortisol, which is a hormone that triggers the "flight or fight" response when you're in a dangerous situation.

High amounts of cortisol in the body have been associated with:

- hair loss
- weight gain
- Sleeping difficulty

High amounts of cortisol in the body have been associated with hair loss on top of weight gain and sleeping difficulty. When you have less cortisol in your system, you have a higher chance of getting more restful sleep, preventing hair loss. CBD has been shown to reduce anxiety, improve sleep patterns, and help with stress management in day-to-day situations, potentially reducing hair loss risk. *It makes sense, right?*

CBD Oil Can Reduce Inflammation

Chronic inflammation can be devastating for your general health, but it also significantly worsens the condition of your hair's health, including its growth.

CBD can suppress inflammation in the body, promoting a healthy environment for hair to grow on the scalp; it can also reach sebaceous glands that secrete sebum to lubricate hair in follicles, preventing them from drying out.

CBD Oil Improves Blood Circulation

Better blood flow offers many benefits for the body, especially around hair follicles, encouraging hair growth. Since CBD increases cerebral blood flow, it brings more nutrients to hair follicles while removing harmful toxins and thus allowing hair to become healthier and stronger.

CBD Oil Nutritional Benefits

Incorporating CBD oil into your diet allows you to take advantage of the vast nutrients you may not be getting in your diet to promote healthy hair.

The cannabis plant packs a punch when it comes to nutritional information making it arguably one of the most nutrient-dense plants. Cannabis seeds are considered a complete protein source, are gluten and dairy-free and is packed with Omega-3 and Omega-6 fatty acids. The cannabis leaves are rich in fiber, flavonoids, essential oils, magnesium, calcium, beta-carotene, iron, potassium, etc. Full-spectrum CBD oil incorporates these macronutrients into a small amount.

CBD Vs Prescription Pills

We've all heard the pharmaceutical commercials where the potential list of side effects is frightening. One of them you won't hear much about but is inherent with many prescriptions is hair loss. And we all know for a fact that all prescription pills have some or other side effects. Given a choice between CBD and prescription pills, which would you choose?

For many years, researchers and medical experts have been hinting at the possibilities of fully adopting certain CBD for therapeutic uses due to its efficiency, less dependency, and relatively low cases of negative side effects.

The myriad of research studies initiated over the past few years indicated an interest in the substitution of prescription drugs by hemp extracts proves the popularity and effectiveness of medical cannabis seeds.

Here are 5 pharmaceuticals that CBD can potentially replace:

Anticonvulsants - *epileptic seizures*

Opioids/Narcotics - *pain alleviation*

Anxiolytics/Benzodiazepines - *relieve anxiety*

Antidepressants - *relieves anxiety and depression*

Anti-inflammatory drugs - *reduce inflammation or swelling*

Disclaimer. I am not insinuating to stop all your prescriptions. To avoid inappropriate dosage and health-related issues, switching of prescribed drugs to CBD should be done with caution and with your doctor's opinion.



Endocannabinoid System (ECS): Crucial for Homeostasis

Homeostasis is your body's efforts to keep everything balanced, your internal environment stable and optimal no matter what's going on in the environment around you. Think of a “gatekeeper” who continuously monitors important levels and functions in your body.

Is your temperature too high, too low, or just right? Are you tired and need to rest? Is your heart beating too fast? Do you feel hungry? Is too much of something building up in your bloodstream or inside of your cells? Are your hormone levels what they should be? You get the point. When something is operating outside of the right range, your body activates the ECS to help correct it.

ECS is one of the body’s largest neurotransmitter networks. It is an integrated balancing system for the body and is responsible for keeping in balance a variety of physiological functions, including:

- Immune function
- Inflammation, including neuroinflammation
- Mood
- Movement and coordination
- Sleep
- Appetite, hunger, and metabolism
- Memory, learning, and cognition
- Temperature regulation
- Pain
- Sensory processing

The ECS does this via cannabinoid receptors found in select tissues. The two most prominent cannabinoid receptors are CB1 and CB2.

CB1 Class of Receptors - CB1 receptors located primarily in the brain and central nervous system (CNS) and are responsible for:

- Regulates learning and memory
- Neuronal development & synaptic plasticity
- Regulates reward and addiction
- Reduces pain
- Reduces neuroinflammation and degeneration
- Regulates metabolism & food intake
- Regulates bone mass
- Cardiovascular effects

CB2 Class of Receptors - The CB2 receptors are located primarily in the periphery instead of the central nervous system and are mainly expressed in immune cells, giving it an important role in inflammation and autoimmune response. CB2 receptors are responsible for:

- Allergic and autoimmune inflammatory diseases
- Osteoporosis (loss of bone mass)
- Neurodegenerative diseases
- Ischemic injury from stroke or heart attack
- Chronic pain

- Hepatic (liver) injury and disease
- Alcohol and nicotine addiction
- Weight gain
- Stress responses

Fun Facts.

The first endocannabinoid that was discovered was named anandamide after the Sanskrit word ananda for “bliss”. All of us have tiny cannabis-like molecules floating around in our brains-lucky us.

Endocannabinoid Deficiency

If the body has an endocannabinoid deficiency, cannabis-derived CBD acts as a supplement, giving the body the ability to regulate various functions and processes that are crucial to one’s health.

Endocannabinoid deficiency is believed to be caused by chronic stress, exposure to environmental toxins, and poor lifestyle habits. Symptoms range from forgetfulness, brain fog, decreased tolerance to pain, moodiness, compromised stress response, chronic inflammation, and a poorly functioning immune system that results in frequent illness.

Certain types of hair loss are a major indicator that the body’s ECS is not in balance. Telogen effluvium is generally instigated by high cortisol levels causing irregular, constant shedding. Most prescription drugs, such as blood pressure medicine, can cause hair loss. Nutritional deficiencies, such as insufficient calories, not enough protein etc., may sabotage your normal hair cycle and cause hair loss.

What are the various types of CBD?

With a plethora of options available, we should first identify each type’s technical aspects, including *full-spectrum*, *broad-spectrum*, and *isolate CBD*.

Full-spectrum

Full-spectrum CBD, *whole-plant CBD*, contains all naturally occurring compounds in cannabis. Cannabidiol and other cannabinoids found in cannabis — including trace amounts of THC. It also features terpenes, flavonoids, vitamins, minerals, and essential fatty acids contained in the plant’s waxes. Full-spectrum CBD creates the entourage effect and allows the body to process CBD more efficiently.

Broad-spectrum

Broad-spectrum CBD is almost the same as full-spectrum CBD — except for its THC content. The THC is removed after initial extraction, leaving behind CBD, minor cannabinoids, terpenes, and flavonoids so that the user can benefit from some of the entourage effects.

Isolate

CBD isolate is exactly what it sounds like — pure CBD. The cannabinoid is separated from the other compounds using winterization and fractional distillation. Although CBD isolates may appeal to certain users due to being flavorless and odorless, they only offer the health benefits of CBD. Some cannabis

experts argue that isolated compounds can't use the full potential of cannabis unless they are combined with other cannabinoids and terpenes.

What is the Entourage Effect?

While cannabinoids and terpenes (another significant compound found in cannabis) have been studied for their individual effects, proponents of the entourage effect are interested in how these compounds work when combined with each other. *Think "synergy"*. They insist that consuming whole-plant cannabis produces a different effect than consuming individual cannabinoids or terpenes in isolation. The term "entourage effect" was coined by Mechoulam and Shimon Ben-Shabat in a cannabinoid study from 1999. In the study, Mechoulam and Shabat suggested that this phenomenon explains why botanical drugs (containing the entire spectrum of compounds within a plant) can sometimes be more effective than the plant's isolated components.

Most cannabinoids and terpenes are present in cannabis in such small concentrations, making it difficult to judge the effects of these individual compounds when the plant is consumed as a whole. The exception to this rule is THC and CBD, the two cannabinoids found in the highest percentages in most cannabis strains. The interaction between these two cannabinoids provides one of the strongest arguments for the entourage effect.

Summary

To maximize the benefits of CBD, I recommend using both topical CBD-based products in conjunction with ingesting CBD internally. Using high-quality CBD-based shampoos, conditioner and scalp treatments help protect, moisturize, and repair hair/scalp. CBD extracts, oils, and caplets are measurable in terms of consistent dosing. With that said, finding an effective CBD dosage may depend on the potency, bioavailability, unique biochemistry, weight, the severity of your condition, etc. Set your goals, start slow, but be consistent in your dosing. Increase as necessary.

In addition, I want to clarify that CBD is one key component in treating hair loss. With any imbalances, one must address the whole body to include nutrition, exercise, hydration, and toxic elimination as equal, synergistic facets to health.

As an educator, cannabis user, and resident research nerd, my CBD selection criteria is very strict. Based on anecdotal feedback, potency/efficacy, independent lab testing, purity (non-GMO, no pesticides), entourage effect, company integrity, and customer service, I highly recommend the following companies to check out for your CBD needs. *Please note that I do not have any financial incentive to do so.*

RPM / CBD; Contact Tyler Murphy, Evolve Solve Systems, email tylerm@evolvesalonsystems.com, 800-262-4247

Topical CBD infused products for hair care, skincare, specialty analgesic relief using broad-spectrum CBD

BAYWATER HEMP FARMS, Contact Tim Fields, email Tim@baywaterfarms.com, 410-357-1468
CBD Oil Extracts and Flowers, Balms, and Salves using full-spectrum CBD
Please feel free to contact me on my email, sherri_renee@mac.com, with any questions on usage, dosing, product recommendations, etc.

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