

Cannabis, Hemp and CBD(Cannabinoids) -Dispelling the Myths-

Presenters:

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Prepared for:

 **Sullivan
University**

Overview

I. History of Cannabis

-How was it stigmatized?

I. What is the Endocannabinoid System

-Health Benefits on six
systems of the body



Overview

IV. Treatable conditions and
Research supporting efficacy of CBD

V. Definitions

Learning a new language
-Terms defined such as CBD,
Industrial Hemp,
Broad Spectrum,
Full Spectrum

History of Cannabis

The oldest known written record on cannabis use comes from Chinese Emperor Shen Nung in 2727 B.C.

In 1545 cannabis spread to the western hemisphere where Spaniards imported it to Chile for its use as fiber.



History of Cannabis

In North America cannabis, in the form of hemp, was grown on many plantations for use in rope, clothing and paper.



History of Cannabis

”Reefer Madness”

In the 1930s, parents across the U.S. were panicked by a film called, “Reefer Madness.” It suggested that evil marijuana dealers lurked in public schools, waiting to entice their children into a life of crime and degeneracy.



Reefer Madness

The propaganda film captured the essence of the anti-marijuana campaign started by Harry Anslinger, a government employee eager to make a name for himself after Prohibition ended.



Money at risk

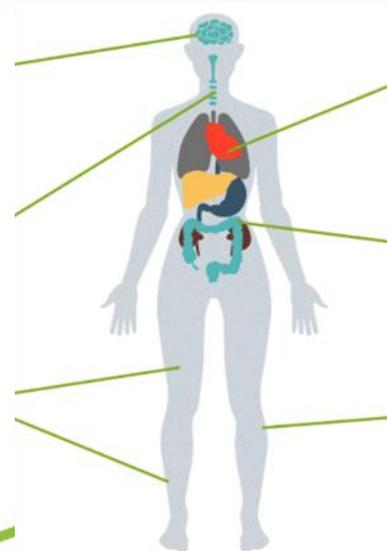
Media mogul William Randolph Hearst supported the criminalization of marijuana, in part because Hearst's paper-producing companies were being replaced by hemp.

Likewise, DuPont's investment in nylon was threatened by hemp products.



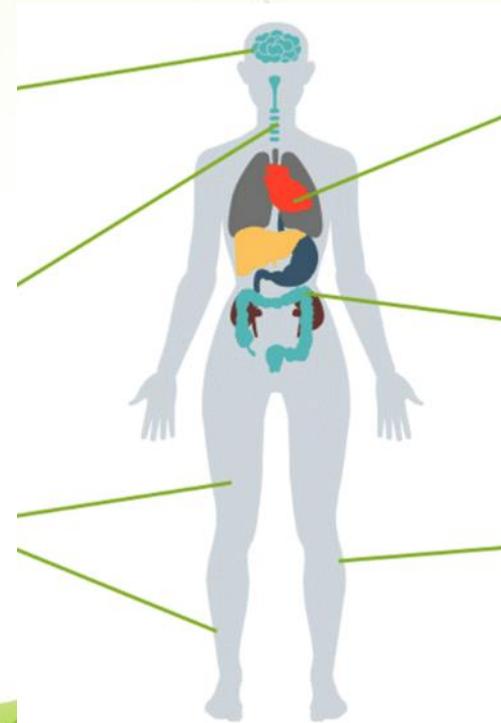
Introduction to the Endocannabinoid System

In 1992, at the Hebrew University in Jerusalem, Dr. Lumir Hanus along with American researcher Dr. William Devane discovered the endocannabinoid system.



Cannabinoids

Ongoing research is showing that phytocannabinoids found in *Cannabis Sativa* and *Cannabis Indica* have a direct effect on the body's Endocannabinoid system.



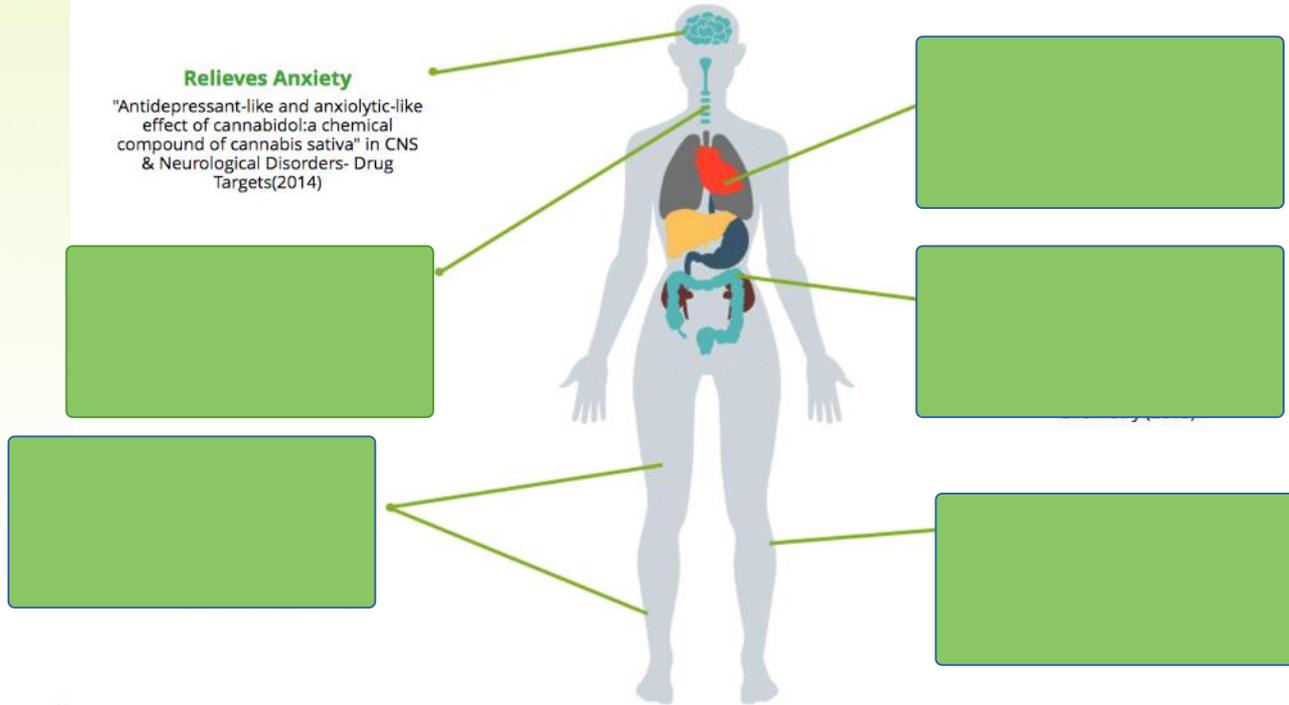
Great, but what is the Endocannabinoid system?



HOW CBD WORKS IN THE HUMAN BODY

Relieves Anxiety

"Antidepressant-like and anxiolytic-like effect of cannabidiol: a chemical compound of cannabis sativa" in CNS & Neurological Disorders- Drug Targets(2014)



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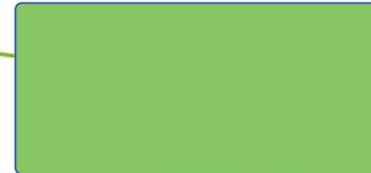
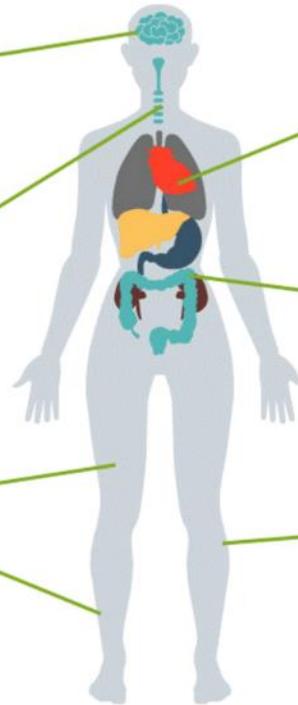
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Neuroprotective

Cannabidiol for neurodegenerative disorders: important new clinical applications for this phytocannabinoid? In the British Journal of Clinical Pharmacology (2013)



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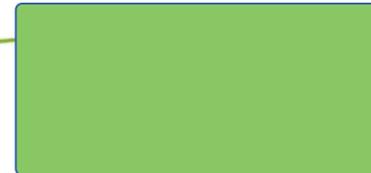
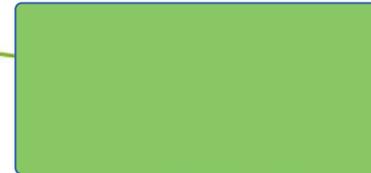
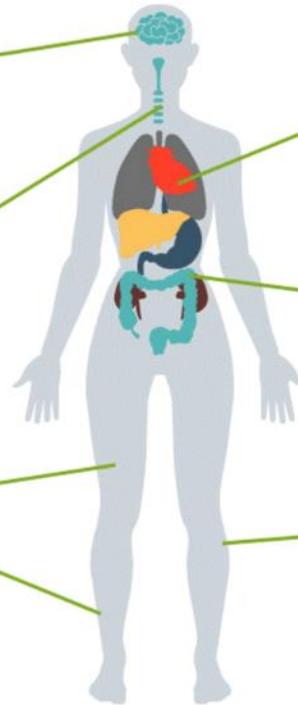
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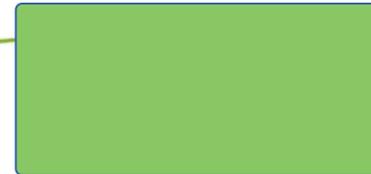
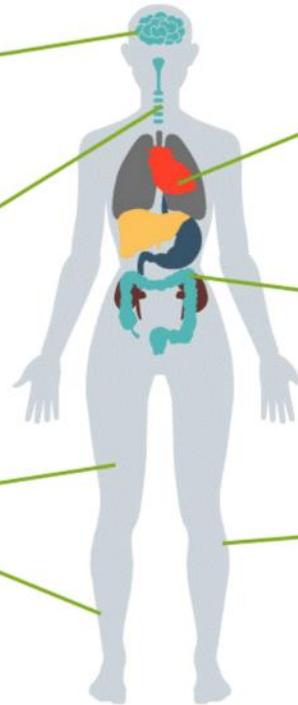
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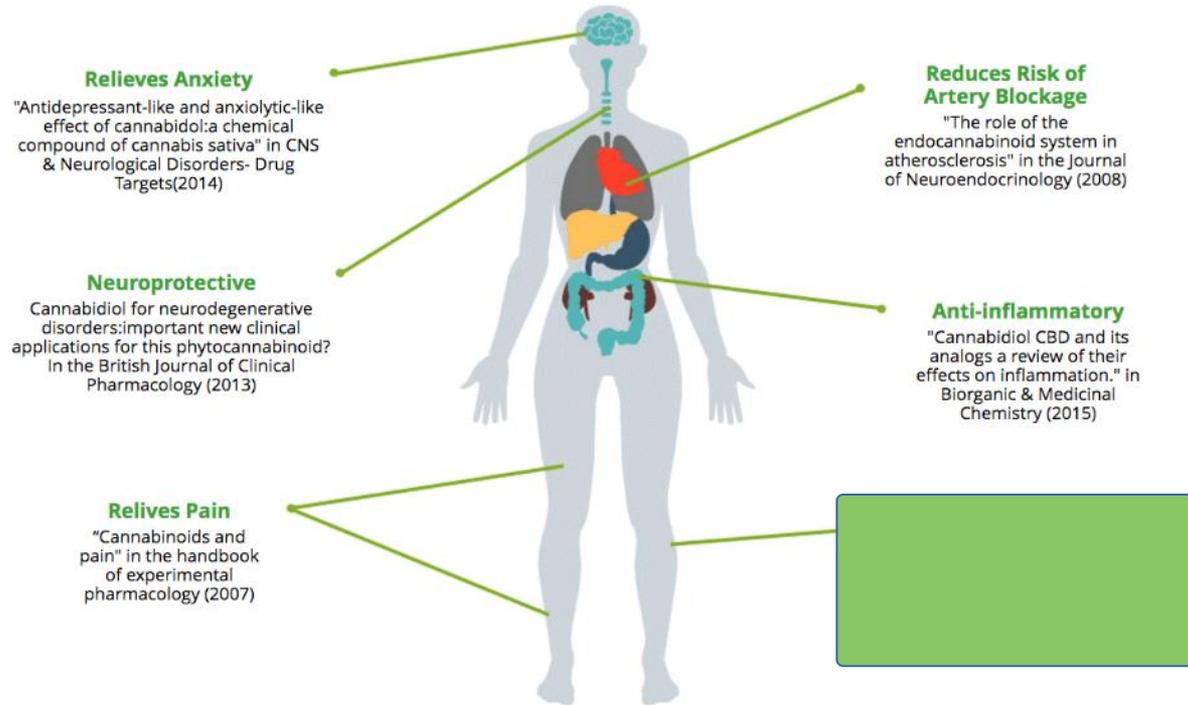
Reduces Risk of Artery Blockage

"The role of the endocannabinoid system in atherosclerosis" in the Journal of Neuroendocrinology (2008)



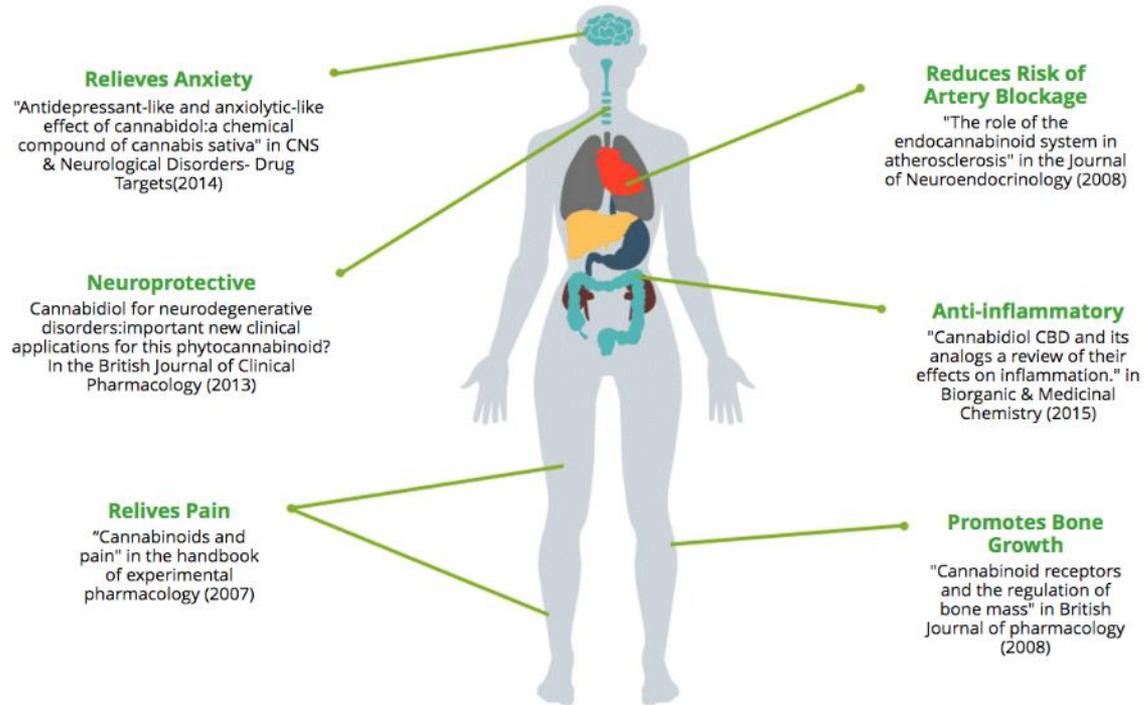
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HOW CBD WORKS IN THE HUMAN BODY



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Benefits of CBD

Topical CBD oil and cream are used in the treatment of inflammatory conditions such as:

Temporomandibular Joint pain

Carpal Tunnel Syndrome

Low Back Pain

Arthritis

Bursitis



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Benefits of CBD

Other dosages CBD, taken orally, are used to treat conditions such as anxiety, depression and neuro-degenerative disorders.



Benefits of CBD

neurodegenerative disorder

 (NOOR-oh-dee-JEH-neh-ruh-tiv dis-OR-der)

A type of disease in which cells of the central nervous system stop working or die. Neurodegenerative disorders usually get worse over time and have no cure. They may be genetic or be caused by a tumor or stroke. Neurodegenerative disorders also occur in people who drink large amounts of alcohol or are exposed to certain viruses or toxins. Examples of neurodegenerative disorders include Alzheimer's disease and Parkinson's disease.

Benefits of CBD

CBD has been used in treatment of Epilepsy, Multiple Sclerosis and Rheumatoid Arthritis

NCBI Resources How To

PMC US National Library of Medicine National Institutes of Health

Journal List > Cell Death Dis > v.11(8), 2020 Aug > PMC7463000

Cell Death & Disease

Cell Death Dis, 2020 Aug; 11(8): 714. PMID: PMC7463000
Published online 2020 Sep 1. doi: [10.1038/s41419-020-02892-1](https://doi.org/10.1038/s41419-020-02892-1) PMID: [32873774](https://pubmed.ncbi.nlm.nih.gov/32873774/)

Cannabidiol (CBD): a killer for inflammatory rheumatoid arthritis synovial fibroblasts

Torsten Lowin,^{1,2} Ren Tingting,¹ Julia Zurmahr,¹ Tim Classen,² Matthias Schneider,¹ and Georg Pongratz¹

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PMC US National Library of Medicine National Institutes of Health

Journal List > Front Neuro > v.9, 2018 > PMC5074262

frontiers in Neurology

Front Neurol, 2018; 9: 183. PMID: PMC5874292
Published online 2018 Mar 22. doi: [10.3389/fneur.2018.00183](https://doi.org/10.3389/fneur.2018.00183) PMID: [28623067](https://pubmed.ncbi.nlm.nih.gov/28623067/)

Cannabidiol to Improve Mobility in People with Multiple Sclerosis

Thorsten Rudroff^{1,2,*} and Jacob Sosnoff³

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Multiple sclerosis (MS) is a demyelinating disease of the central nervous system (CNS) that affects an estimated 2.3 million people worldwide (1). The symptoms of MS are highly varied but frequently include pain, muscle spasticity, fatigue, inflammation, and depression. These symptoms often lead to reduced physical activity, negatively impact functional mobility, and have a detrimental impact on patients' quality of life. Although recent years have seen significant advances in disease modifying



National Institutes of Health

Research: Harvard Health

CBD may offer an option for treating different types of chronic pain.

A study from the European Journal of Pain showed CBD applied on the skin could help lower pain and inflammation due to arthritis.



Harvard Health Publishing

Another study demonstrated the mechanism by which CBD inhibits inflammatory and neuropathic pain, two of the most difficult types of chronic pain to treat.



Harvard Health Publishing

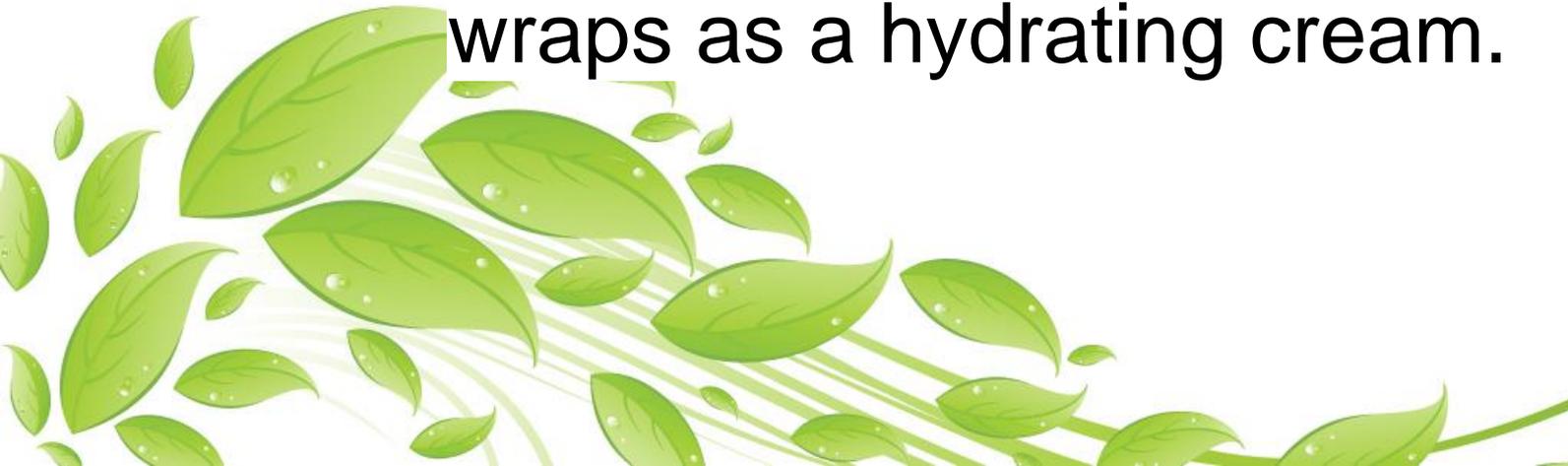
CBD is commonly used to address anxiety. For patients who suffer through the misery of insomnia, studies suggest that CBD may help with both falling asleep and staying asleep.



Benefits of CBD when used topically

Improved circulation on the superficial layers of the skin for face, neck, shoulders and arms.

Lovely moisture after body treatments like scrubs, as well as body wraps as a hydrating cream.



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Cannabidiol in Anxiety & Sleep

For the geeks in the room:

The final sample consisted of 72 adults presenting with primary concerns of anxiety ($n = 47$) or poor sleep ($n = 25$). Anxiety scores decreased within the first month in 57 patients (79.2%) and remained decreased during the study duration.



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Cannabidiol in Anxiety & Sleep

Sleep scores improved within the first month in 48 patients (66.7%) but fluctuated over time. In this chart review, CBD was well tolerated in all but 3 patients.





Full Spectrum

- High CBD content for maximum therapeutic impact
- Certificate of Authenticity from the supplier
- Never contain additives you can't pronounce
- Non-toxic CO2 extraction vital to the quality of the oil



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- Low levels of CBD but balanced levels of Omega 3,6,9
- Very good moisturizer used in cremes
- Excellent gut healing properties
- Most popular extraction includes butane which leaves a carcinagen residue

Broad Spectrum



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**We recommend you
choose Full Spectrum for
the benefits of all the
Cannabinoids**



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Benefits of CBD

Medicinal CBD oil is extracted from the leaves and buds of the cannabis plants. Strains are bred and chosen that are known to have higher CBD levels in order to maximize the potency.



Kentucky Farms

To comply with the 2018 Farm Act and Kentucky Department of Agriculture **all plants are less than .3% THC.** Compliance officers visit regularly.



Cannabis and CBD oil

CBD oil has become very popular because it can be helpful in the treatment of various conditions without the typical intoxicating effects of THC,



Know what's in your oil.

Awesome.

If we want to explore the benefits, how do we figure out what to use?



Know what's in your oil

Soil remediation



Terms you may hear

Topical versus Ingestible

Indica vs. Sativa

Calm versus energied isn't always the case.

Must know the CBD and the Terpenes



Terms you may hear

COA - Certificate of Authority



Terms you may hear

Industrial Hemp

CBG

CBA

D8

Get in touch to learn more.



In conclusion

Story of Vietnam Vet

More research is being conducted but the preliminary findings are very positive regarding the medical benefits of Cannabidiol.(CBD)



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Thanks for your time and
attention!

