

Brief History of Cannabis

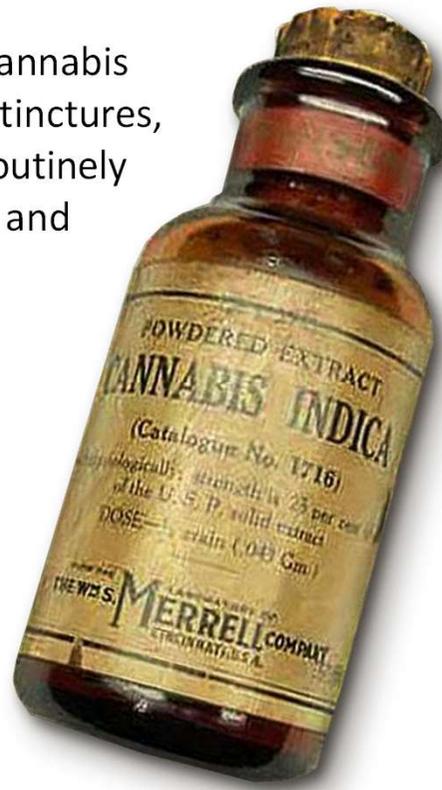
- Cannabis has been part of human evolution since the beginning of recorded history
- In ancient Chinese times, cannabis was used as a medicine, including its oils, tinctures, and cannabis-based preparations
- Sisel is helping lead the charge in the reemergence of awareness of this amazing, healing plant



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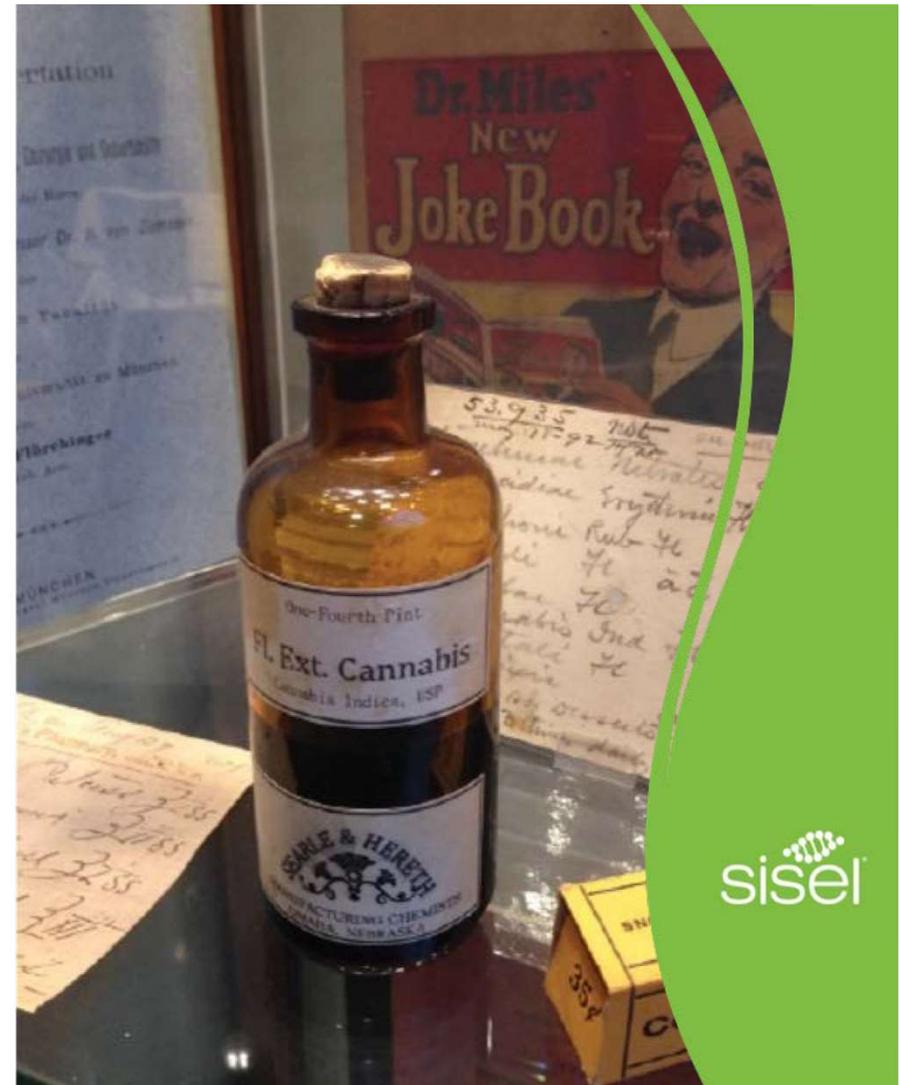
1930's and Cannabis' Demise

- Up until the late 1930's, Cannabis based medications – oils, tinctures, and preparations – were routinely used by American doctors and physicians worldwide
- 1850 – 1937 Hemp was a huge cash crop
- In 1909, Bayer Aspirin's competition was Hemp



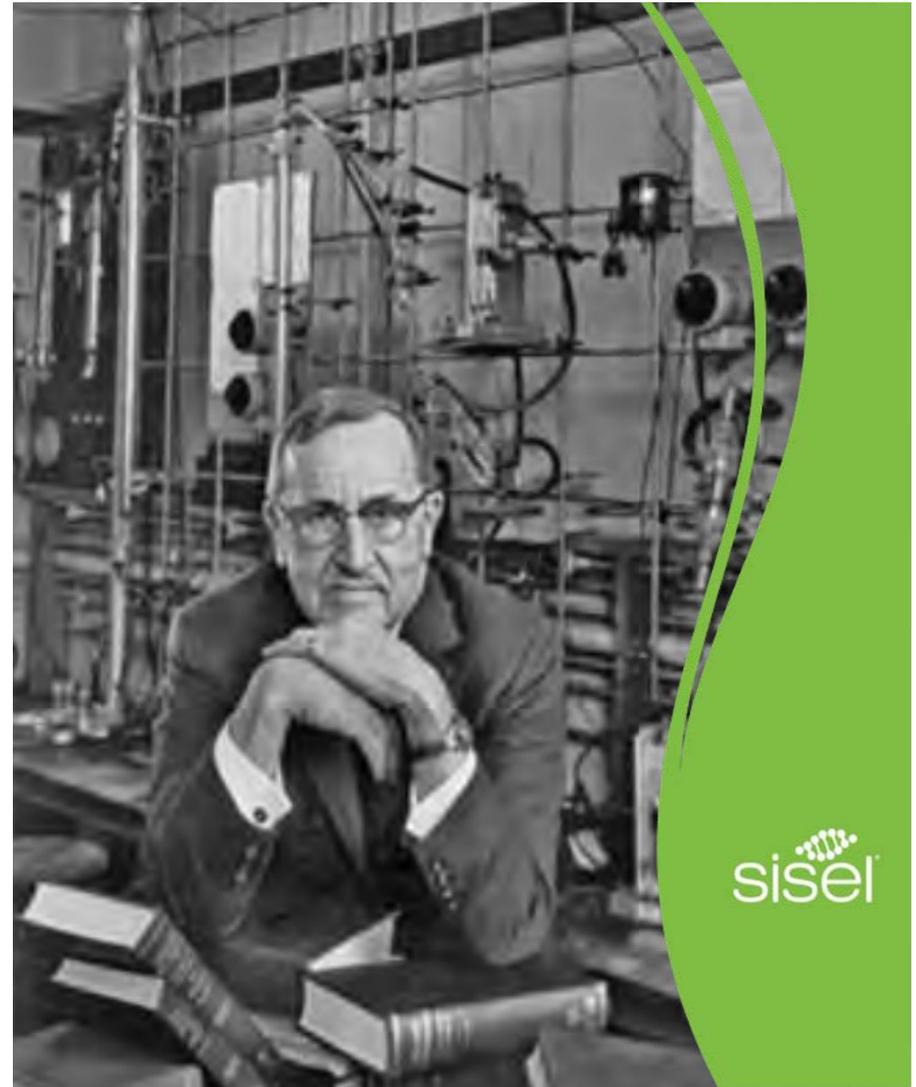
Marihuana Tax Act of 1937

- The Marihuana Tax Act of 1937 ended the role of Cannabis as a medicine and as an industry in the United States
- The creation of this bill is often attributed to the newspaper circulation and paper production industries that were frightened that the Hemp industry would put them out of business
- And with the passage of the United Nations Single Convention Treaties of 1961 and 1971, Cannabis (including Hemp) became prohibited throughout much of the world and was sadly withdrawn as an “accepted” medicine



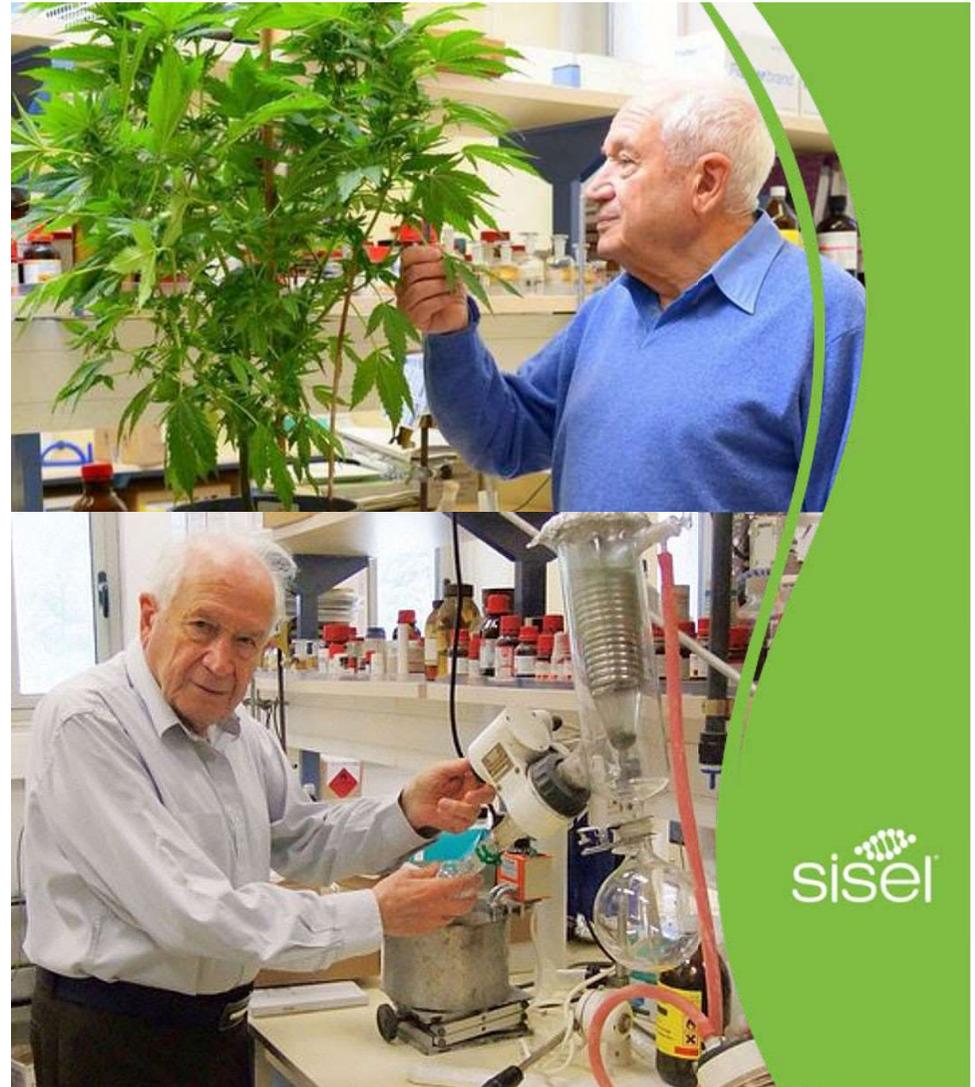
The Birth of Modern Cannabis Medicine

- Dr. Roger Adams isolated CBD from the other plant matter in 1940 and received a patent on it in 1942
- In 1946, Dr. Walter Loewe began testing Cannabinoids as medicine
- In 1963, Dr. Raphael Mechoulam (Meshulum) described the chemical structure of CBD and would later isolate THC



The Birth of Modern Cannabis Medicine

- British Pharmacopoeia released a Cannabis tincture with CBD full spectrum extracts, making it the first example of a government-backed medication
- In 1978, New Mexico officially recognized Cannabis as a medicine available to the public
- In 1980, Dr. Mechoulam teamed up with international researchers and was successful in demonstrating that patients treated with CBD experienced a reduction in seizures and an improved condition
- 18 years later in 1996, California was the first US state to completely legalize medical Marijuana



The Birth of Modern Cannabis Medicine

- European hemp crops grown from 2007 – 2011
- Each year gradually higher concentrations of CBD
- Fall of 2011 enough CBD found to possibly have benefit
- Crops were harvested and oils extracted as a raw or crude paste



The logo for 'sisel' is located in the bottom right corner of the slide. It consists of the word 'sisel' in a lowercase, white, sans-serif font, with a small, stylized graphic of a hemp plant or leaf above the 'i'.

The Birth of Modern Cannabis Medicine

- Eventually exported to US
- Final formulations made and marketed mid-2012
- The World Health Organization (WHO) Seeks to Remove Cannabis from the United Nations Single Convention Treaty on Narcotics
- Further WHO CBD Hearings in Geneva
Switzerland Showed that CBD is Safe and Will NOT Be Scheduled as a Drug, thus the WHO Approves CBD's



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The Birth of Modern Cannabis Medicine

- In 2013, Charlotte Figi's parents worked with some medical Cannabis growers to come up with a high CBD strain of Cannabis that significantly improved her serious epileptic disorder. Her case received massive media attention, propelling CBD's medicinal benefits into the public consciousness

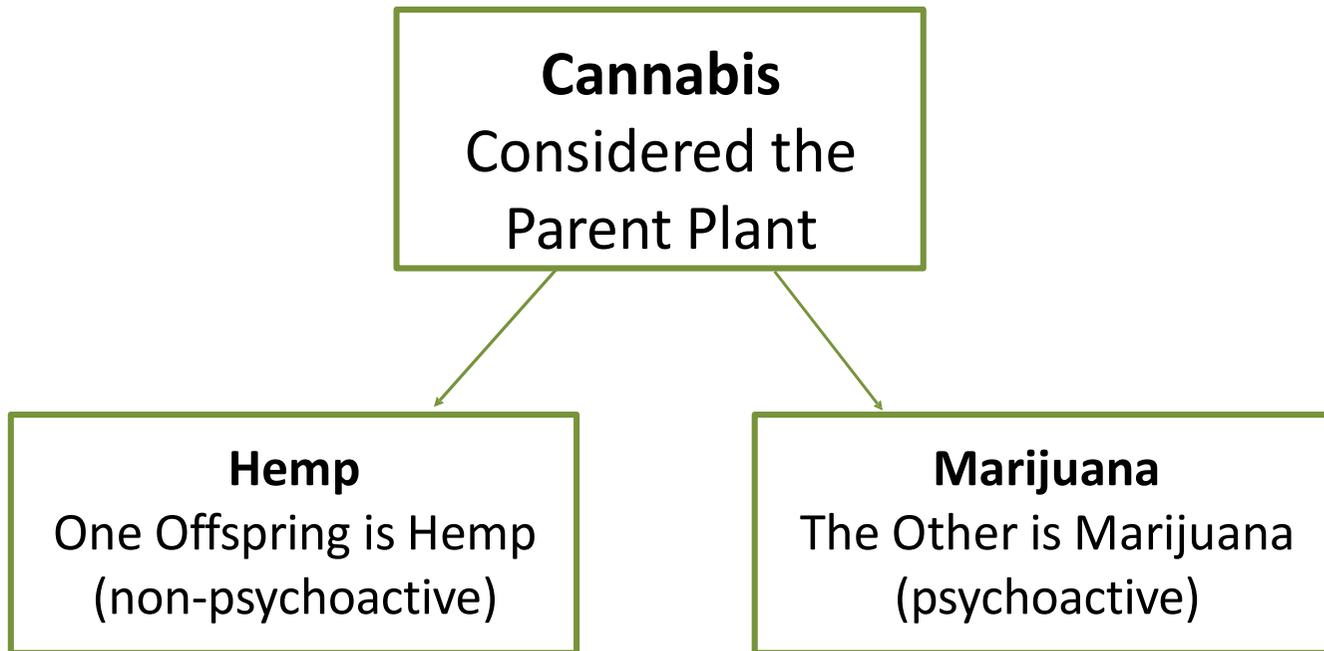


US Farm Bill of 2018 Included the Hemp Farming Act of 2018

- Congress removed Hemp and its derivatives, including CBD, from the Controlled Substances Act, meaning that it is no longer a violation of the Controlled Substances Act to possess Hemp, Hemp products, or CBD derived from Hemp
- We are on the cusps of a wild "new" old cash crop
- From the Federal perspective, CBD is legal in all 50 States. However, individual States will determine how they want to regulate it. Therefore, Idaho, Nebraska, Kansas, and South Dakota still prohibit CBD products, however CBD regulations around the country are changing almost daily



Confusion still abounds when people talk about Cannabis. Hemp and Marijuana are part of the Cannabis family, but some people mistakenly use them interchangeably.



Understanding the Differences Between Hemp and Marijuana



Hemp

- Tall and lengthy, 10-20 feet high
- High concentration of CBD (non-psychoactive)
- Around the world, it is grown mostly for fiber, and used in textiles
- Cannabis sativa



Marijuana

- Short and bushy about waist high
- High concentration of THC (psychoactive)
- Grown for psychoactive effect
- No industrial application
- Cannabis indica

Understanding the Differences Between Hemp and Marijuana



Hemp

- Hemp food products are fully legal in the USA
- Hemp food products are regularly found in US health food stores
- Hemp seed, hemp oil, hemp protein powder

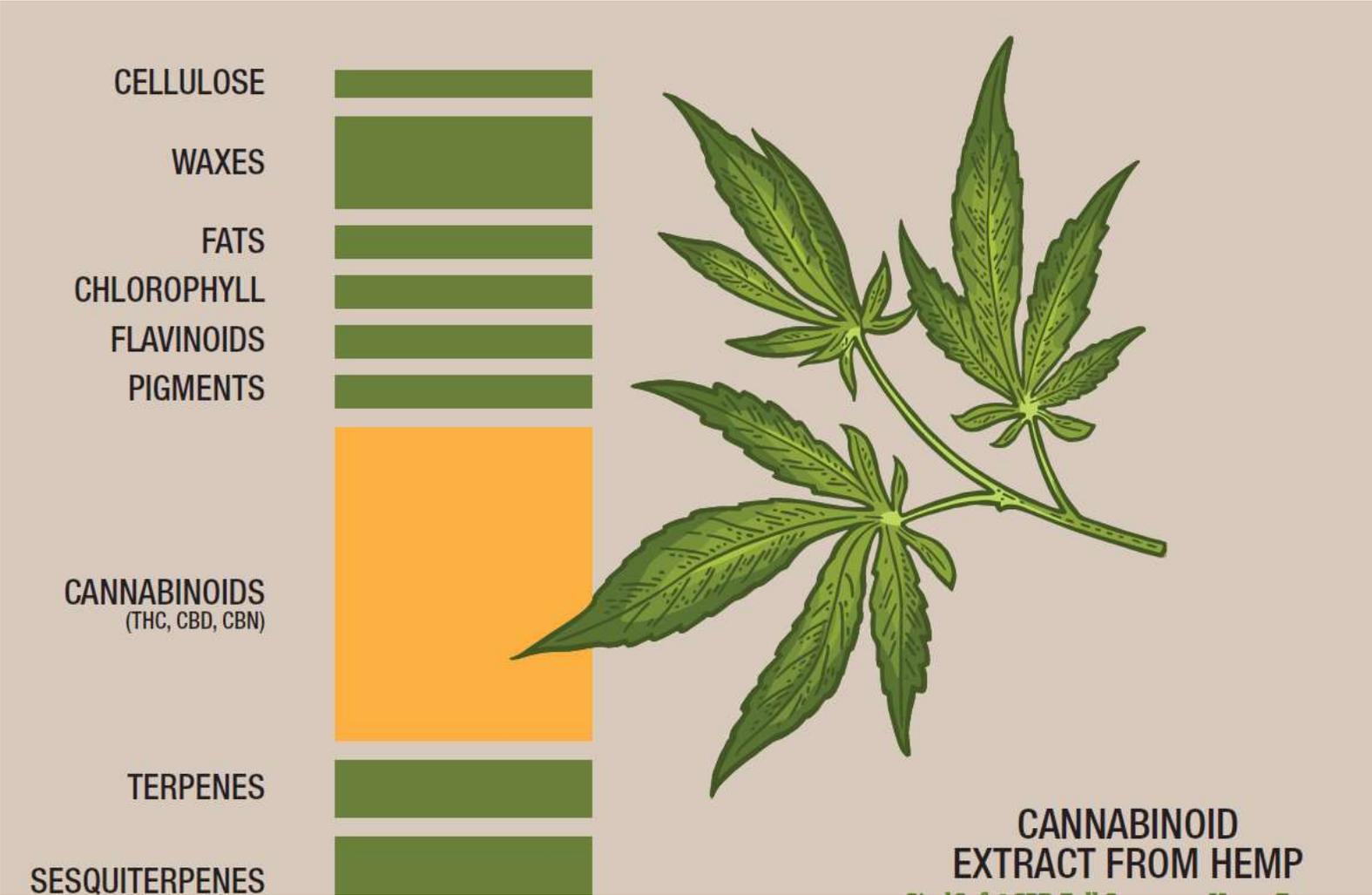


Marijuana

- Remains illegal at federal level
- 30+ US states legalize for medical purposes
- 17 US states approve CBD forms of Marijuana for epilepsy in children
- 10 US states + D.C. have legalized for recreational usage

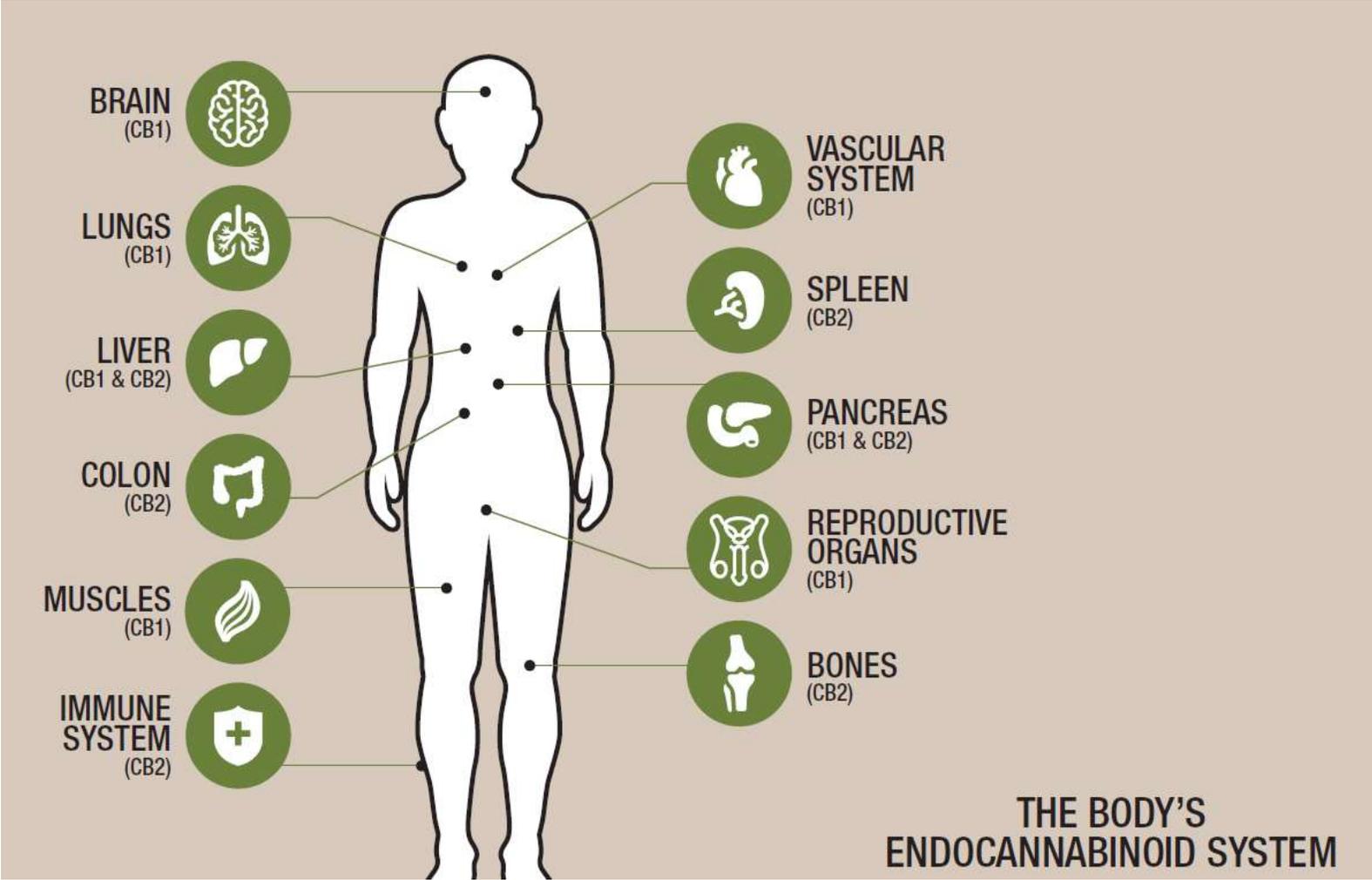
What Are Cannabinoids?

- Cannabinoids are special compounds found in the Cannabis plant family. There are over 100 known Cannabinoids, CBD is just one of them
- There are nearly 400 other chemical compounds in Cannabis that are common to all plants and are potentially beneficial, like chlorophyll, terpenoids, flavonoids, and plant waxes
- Cannabinoids and Cannabinoid-like compounds are found in a handful of other plants such as Echinacea, Flax, common tea, Kava, and Hops



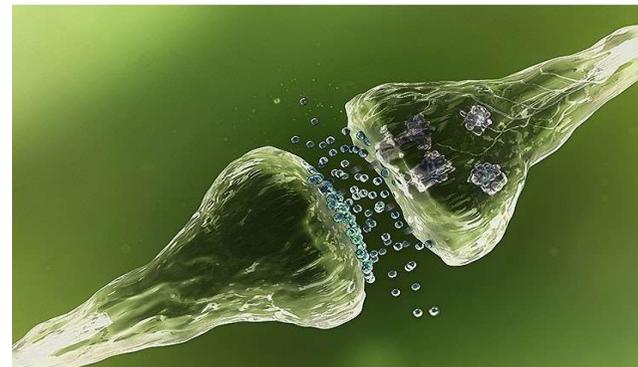
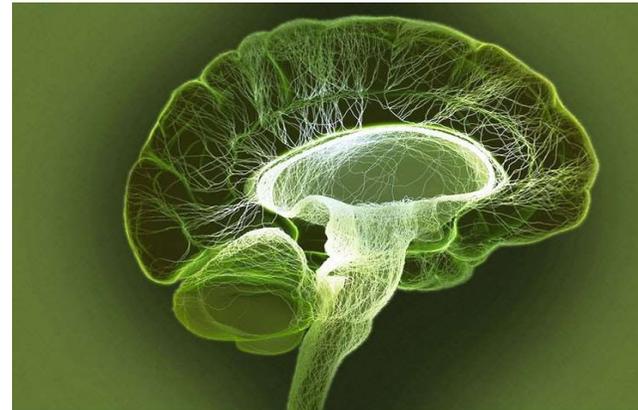
What is the Endocannabinoid System?

- In the 90s, scientists discovered that our bodies have an entire regulatory system called the Endocannabinoid System (ECS), or the Endogenous Cannabinoid System. In fact, the ECS is the largest, self-regulating system within our bodies
- The ECS includes cell receptor sites—CB1 and CB2—found throughout the body in the skin, gastrointestinal, reproductive, immune, and central and peripheral nervous systems
- The ECS uses Cannabinoids to transmit certain signals to regulate homeostasis within us. The ECS balances our mood, appetite, sleep, and hormone production
- Plant based Cannabinoids (Phytocannabinoids) have analogues in the human body, meaning that our bodies produce Cannabinoids too
- **You could say our bodies were designed to interact with Cannabinoids**



What is the Endocannabinoid System?

- The CB1 neurotransmitter receptor site in the brain has more receptor sites than ALL OF THE OTHER neurotransmitter sites COMBINED!
- Thus, our bodies are designed to accept plant-based Cannabinoids



CEREBRAL CORTEX

decision making, cognition
& emotional behavior

PUTAMEN

regulate movements &
influence various
types of learning

HIPPOCAMPUS

memory & learning

CEREBELLUM

motor control &
coordination

**DORSAL VAGAL
COMPLEX**

emesis

CAUDATE NUCLEUS

learning & memory system

GLOBUS PALLIDUS

regulate voluntary movements

HYPOTHALAMUS

body temperature, feeding,
neuroendocrine function

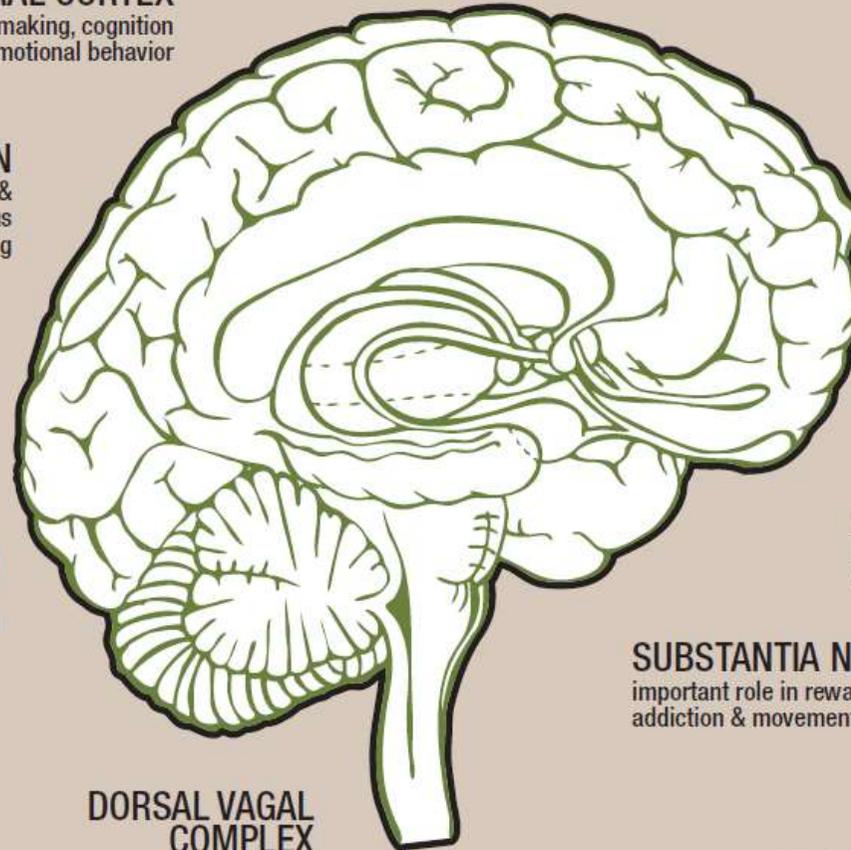
AMYGDALA

responsible for anxiety & stress,
emotion of fear, pain

SUBSTANTIA NIGRA

important role in reward,
addiction & movement

**DISTRIBUTION OF
CB1 RECEPTORS IN THE BRAIN**



Endogenous Cannabinoids

- The body produces Cannabinoids called Endogenous Cannabinoids
- Unfortunately, Endogenous Cannabinoids are quickly degraded by normal human enzymatic activity
- Plant-based Cannabinoids are not as quickly degraded
- Homeostasis is easier for the body to maintain by supplementing Cannabinoids like CBD (Cannabidiol)

Benefits of Cannabidiol (CBD)

- Cannabidiol or CBD is one of many Cannabinoids that can activate receptors known to moderate inflammation, pain perception, and body temperature
- CBD can also increase the amount of Anandamide, or the “bliss molecule,” which plays a part in the neural generation of motivation and pleasure
- The "Runner's High" is a phenomena created by production and release of Anandamide as well as Endorphins. Both are feel good neurotransmitters. Only Anandamide crosses the blood-brain barrier, thus responsible for the Runner's High effect
- Human breast milk contains significant quantities of Cannabinoids for sleep, nutrients, and mood for babies

Delivery Systems

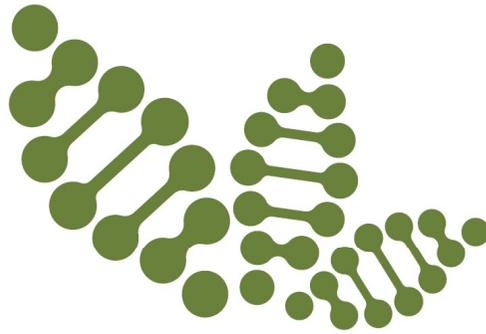
- Topical – creams, serum, oils
- Internal – pills, sprays, inhalation, tinctures
- Up to 90 - 95% of the bioavailability of oral products lost due to digestion
- Sublingual (under the tongue) is superior

SiselSafe® CBD Broad Spectrum Hemp Extract

- The fun of building a brand – we wanted it to look and feel more apothecary to go back to the roots of Hemp use in the US – natural, pure, the science of Sisel meets the centuries of traditional use
- By not calling it by its full name you are missing an opportunity to differentiate and emphasize where it is sourced from



WHY



?

SiselSafe[®] CBD

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Consider the Source

- Ours is a premium product made with Broad Spectrum Hemp Extract from the flower, leaf, and stalk and NOT Hemp Oil from the seed
- Hemp Seed Oil has 25 Parts Per Million (PPM) of CBD, whereas Hemp Extract has 150,000 PPM of CBD
- You get virtually no therapeutic benefit from Hemp Seed Oil
- Cheap, mislabeled products from companies trying to capitalize on the popularity of CBD often say, “CBD from Hemp Seed Oil” or don’t actually contain any CBD at all
- Since the FDA has yet to provide certain regulations for the market, low-quality, poorly-sourced, mislabeled, and even dangerous products abound. **We are transparent with our product, open with our manufacturing practices, and proud of the founding mission to only produce the safest, most effective products possible**



Where Does the Hemp Come from and How is the Product Produced?

- Does the Hemp come from the USA where regulations are in place for farmers or does it come from another country where the laws are more lax? As of October 2018, \$78 million of hemp was being imported from overseas.
- Is the Hemp grower ensuring a sustainable and renewable crop?
- Is the Hemp grown organically without the use of pesticides, herbicides, or harmful chemical fertilizers?
- Many companies are buying from a broker and don't know where it came from or what controls we and were not used in growing
- Sisel can trace our Hemp back to the very field and harvester
- Is the manufacturer GMP Certified and FDA Registered and is the product made in the USA under strict quality controls?



Can your CBD oil even be absorbed?

- SiselSafe CBD Full Spectrum Hemp Extract uses carrier oils that contains Medium Chain Triglycerides (MCT) like coconut or palm kernel oil, because these oils are easier for the body to absorb
- Better absorption means better results



Calms the mind from daily stressors, helping to optimize the body*

- When you are stressed your body tries to divert resources from other critical systems in order to cope. Run too long in this mode and your health and performance can suffer
- SiselSafe CBD Full Spectrum Hemp Extract can help calm the mind (some describe its soothing effects as a warm bath) from daily stressors, which then allows your body to function more optimally and your mind to focus



Promotes a healthy response to exercise activity*

- With a body free from mental and physical stress, you can focus your energy on amplifying your routine
- SiselSafe CBD Full Spectrum Hemp Extract can help your body recover faster from workouts and other physical activities by promoting a healthy, more balanced response



Acts as a neuroprotective against oxidative stress*

- SiselSafe CBD Broad Spectrum Hemp Extract may help reduce oxidative stress on the brain and nervous system
- May also support the growth and development of new neurons
- In its patent (#6,630,507) titled CANNABINOIDS AS ANTIOXIDANTS AND NEUROPROTECTANTS, the U.S. federal government makes many impressive claims about CBD, stating that:
 - “Cannabinoids are potent antioxidants... they easily penetrate tissues giving them the ability to enter the central nervous system and brain.”
 - “Non-psychoactive cannabinoids such as CBD are particularly advantageous as they are non-toxic and exhibit unique antioxidant properties without the undesirable effects of THC.”
 - “The antioxidant strength of CBD is significantly greater than that of either Vitamin C or Vitamin E.”



Supports the digestive process*

- SiselSafe CBD Broad Spectrum Hemp Extract may help maintain a healthy digestive system by supplementing the Endocannabinoid System, which plays an important role in:
 - gastrointestinal function
 - hunger signaling
 - motility
 - gut permeability
 - gut microbiota
 - supporting the stomach lining
 - promoting a healthy response to excess stress



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SiselSafe CBD Broad Spectrum Hemp Extract Features

- 1500 mg per bottle of Broad Spectrum Hemp Extract, including many other cannabinoids, terpenes, vitamins, fatty acids, minerals, and compounds from the whole plant, thus creating a synergistic entourage effect for maximum results
- Natural, non-GMO, and organically grown with no pesticides, herbicides, or chemical fertilizers by American farmers
- Non-psychoactive formula containing 0.3% or less THC
- Tested by multiple labs to ensure safety and potency
- Made in the USA in a GMP Certified and FDA Registered facility
- Delicious Sweet Orange flavor



Directions

Start by using 1 full dropper and assess how you feel. Full serving size is two full droppers. When dispensing, avoid contact with the mouth, squeezing liquid under the tongue, and holding for 1-2 minutes before swallowing. Avoid contaminating dropper with any surface.

1500 mg Hemp Extract, 60 ml/bottle

