

Cannabis, Hemp, and Marijuana - What does it mean?!

- Hemp and marijuana are both cannabis.
- They are the exact same plant. Example - Think of the variety of tomatoes there are; they might look a bit different, be different shapes and sizes, even taste a bit different, but they are still all tomatoes and in the tomato family.
- The only difference between hemp and marijuana in the United States is a government definition that defines hemp as the cannabis plant with .3% THC or less. This means that as soon as your cannabis plant reaches .4% THC, your crop is considered marijuana, and therefore federally illegal in the eyes of the law. This is an arbitrary number that has no particular scientific meaning and is only a barometer of legality dictated by our government to regulate hemp and marijuana differently.
- Before the THC-focused government definition, there was the scientific/plant classification/taxonomy definition that related to the genetics of the seed; Indica, Sativa, and Ruderalis. All are cannabis, but different species/genetics within cannabis.
- Indicas originated in mountainous regions of the planet where they adapted to their environment by growing low to the ground and bushy.
- Sativas originated in tropical climates where they grew tall and lanky.
- Ruderalis was found to be native to areas of Asia, Central/Eastern Europe, and Russia where botanists used the term ruderalis to classify breeds of the hemp plant that had escaped human cultivation, thus adapting to the extreme environments found in these climates. So basically what we would call wild hemp.
- These days, most cannabis you see being sold and grown is a hybrid of these genetics. It is uncommon to find a landrace sativa or a landrace indica that has never been crossed with another genetic. This is why it is common to see and experience a cannabis plant with physical and physiological characteristics of all three - indica, sativa, and ruderalis -genetics today.
- Due to prohibition not actually stopping the growth and use of cannabis, but rather just forcing it to be grown secretly indoors, the cannabis we consume today is a bit modified from the original cannabis that used to grow naturally outside in various climates of planet earth. We find that cannabis grown in nature, or as closely mimicking nature as possible, has a wider variety of compounds that are beneficial to health compared to cannabis grown synthetically indoors where typically raising the THC percentage is the main focus and the presence of other health promoting compounds is not as valued or sought after.
- Cannabis produces hundreds of health promoting compounds, and THC is just one compound that it produces. As THC is the compound responsible for the high we associate with cannabis, THC has been the main focus until recently when science and research began understanding the plethora of other compounds cannabis produces that are highly valuable and applicable to medicine, healthcare, and what makes you feel so good when consuming cannabis. Before people understood this due to a lack of research, cannabis had been bred over and over again for high THC percentages which contributes to how it has become a bit modified from what it used to be like in nature. (And to be clear, while THC is responsible for the high, it also has a plethora of medicinal properties including anti inflammation, anti nausea, and antispasmodic to name a few. THC's euphoric, psychoactive property is by no means its only property, and it is a medicinal, therapeutic compound.)
- As you can imagine, taking cannabis out of its natural habitat has caused disruption and distress to our environment and stripped this life-promoting plant from our food web and ecosystems which has negatively affected all life on earth from our soil to our environment to human and animal welfare. The most dangerous thing about cannabis is the fact that it was made illegal. Organic cannabis provided by nature was never a dangerous plant. A war should have never been waged on this earth-provided plant that promotes health and optimal functioning of earth and all living beings. The wrongful, greed-fueled demonization and

prohibition of cannabis, amongst other earth-provided plant spirit medicines, has been one of the greatest disservices to humanity and planet earth of our time. Modern day humans seem to be the only species on earth that work against nature rather than with it for all to benefit. Unfortunately, many seem to think we are somehow above nature rather than deeply intertwined with and one with nature. The reality is a war on nature is ultimately a war on ourselves, and this is why we are in the environmental crisis we are in today. We have spent far too many decades valuing the almighty dollar more than we have valued our own planet and the soil that feeds us. The good news is this planet and the cannabis plant, much like ourselves, are incredibly resilient. We can and do have the ability to recover and restore the damage we have done to ourselves and this planet over the last 50-80 years.

Hemp Agriculture

- Hemp has thousands of every day uses and applications!
- Hemp has been around and used as building material for thousands of years.
- The first U.S. flag was made of hemp fiber.
- The first draft of the Declaration of Independence was written on hemp paper.
- The founding fathers of America grew hemp. George Washington, Thomas Jefferson, and Benjamin Franklin to name a few.
- In the 1940's, Henry Ford famously designed and built a car made almost entirely of hemp!
- Hemp is an incredibly versatile natural resource that has the ability to cleanse and remediate our soil as it returns nitrogen and nutrients back into the soil while absorbing toxins like environmental pollutions, lead, and other heavy metals.
- Fiber: Textiles, clothing, rope, and paper can all be made out of hemp.
- Hemp is one of the most durable fibers on planet earth. It is also antibacterial and anti fungal unlike one of our most popular clothing fibers today, cotton. More chemical pesticides are used for cotton than for any other crop on earth, and cotton requires a lot of water to grow. Hemp can be grown using a third of the water cotton needs to grow and can be grown completely organic with no chemical pesticides. Hemp fiber also has the ability to protect your skin as it naturally filters UV light. Hemp fiber is breathable, and as mentioned above, is antibacterial and anti fungal allowing multiple wears before needing to be washed. Another win for our environment and natural resources.
- Fuel: Cars can be fueled by hemp biodiesel!
- Biodegradable Hemp Plastic: Eco friendly plant based plastic that can biodegrade in just 3 to 6 months in the right conditions. It is not the only solution to our plastic problem, and it isn't a perfect solution as there are still problems within this solution, but it would make a significant difference and is certainly a step in the right direction. The best solution to our plastic crisis is to significantly reduce your purchase of plastic (especially single use plastics!!!), reuse the plastics you do have, and properly clean and dispose of what you are done with/can no longer use in a recycling facility or recycling pick up service. Conscious consumption of all things plastic is crucial to the health of our planet!
- Hemp provides nutritional seeds and oil that support optimal functioning, anti inflammation, and support overall health and wellbeing of humans and animals.
- Animal bedding: Animal bedding made of hemp produces minimal dust, is absorbent, reduces odor, is biodegradable, and saves trees.
- Animal feed: Animal feed made with hemp benefits health, increases performance, wellness, and quality of life.
- Hempcrete: Hempcrete is lightweight cementitious insulation that is energy saving, maintains shape and thermal properties, regulates internal moisture, is fire resistant, non toxic, non irritant, doesn't attract rodents, and helps maintain a healthy, durable home or building.

- And more! The every day applications of hemp are seemingly endless. Feel free to study the history of hemp agriculture to learn more, and be on the lookout for more hemp-based products as hemp rises out of prohibition and regains its place in the agriculture world!

The Planet's History with Cannabis

- Mentions of the cannabis plant date all the way back to the very first documents of recorded human history, including drawings of the plant, writings of the plant, and even mummified plant material in prehistoric tombs.
- Cannabis is nothing new to humanity. Across various cultures and time periods, you can find cannabis mentioned for mental, physical, environmental, and spiritual health.

America's More Recent History with Cannabis

- When you study the history of how cannabis became illegal, you quickly realize it was not any respected science or objective data that lead cannabis to being illegal, but rather a matter of politics and blatant racism. Without the ability to easily access information and communicate far and wide as we can today, it was easy to fabricate, mislead, and use fear tactics to push agenda, as is still done today, but think of how easy it was to pull off when we didn't have so much access to information from all over the world at our fingertips. When the political war on this plant began in the U.S., the separation of plant medicine and westernized medicine was underway. The textile, cotton, tobacco, and oil industries were booming and bringing in a lot of money and influence as well. Racial tensions were very high which made it easy to begin the demonization of cannabis by calling it marijuana, after the Mexican language, marihuana, and associating it with people of color in a very negative, inaccurate light that fed on racial tensions. The war on drugs was founded on and heavily relied upon racism that unfortunately still lingers today. Caucasians consume just as many drugs as people of color, and they commit just as many crimes, but the appalling reality is that people of color are arrested and incarcerated at alarmingly higher rates compared to their white counterparts. Racism is woven into the fabric of our society leading to people of color experiencing discrimination at every stage of our criminal justice system. The war on drugs is truly a war of oppression infringing on freedom and consciousness. At no point was the war on drugs designed to protect us, hence why drugs such as nicotine/cigarettes, alcohol, refined sugar, and synthetic pharmaceuticals flow freely in mainstream society despite the fact that all of these are known substances of abuse and addiction, are harmful to health, and can and do kill regularly.
- In 1937, the American Medical Association was actually not in favor of the criminalization of cannabis, and they advised against it. They prescribed it often and did not have any other medications that could more effectively or safely treat the ailments they were prescribing cannabis for at the time. Cannabis was predominately used in the medical field as an analgesic (painkiller), sedative, and antispasmodic agent. This is interesting information as it shows the American medical industry at one point did have our best interest in mind and valued health and integrity more than the almighty dollar. As we see today, things have shifted quite a bit as far too many decisions are made and far too many businesses and organizations are created based on monetary interest much more than with respect to human and planet health or sustainability. Of course the medical industry is not the only entity that is guilty of this. Most operations running for profit make decisions based on monetary interest much more than with respect and mindfulness to planet/human/animal health and welfare. The ruling thought tends to be, 'How can we make more money? How can we make more money faster? How can we produce more quickly? How can we cut production costs?' rather than, 'How can our product or service sustainably promote the

health and wellness of this planet and all living beings?' When every decision is made for the almighty dollar and immediate convenience rather than planet welfare, something or multiple things inevitably suffer, including the planet, our environment, people, plants, and animals. One or all of these things suffer when we make decisions for quick money rather than sustainability and human/planet/animal welfare.

- Prior to 1937, cannabis was not illegal or a schedule one substance. Several forms of cannabis were widely used and respected as an important natural resource for health, medicine, agriculture, and sustainable production of goods. Medicine with cannabis oil as a main ingredient was prescribed by doctors from 1840 all the way to when the political war on cannabis began in 1937. To put this into perspective, my own grandmother was born in the 1920's when cannabis was still a respected medicine prescribed by doctors. Most of us are only one or two generations removed from when cannabis was respected and widely used. Unfortunately, for anyone born after 1937, we have only ever known a reality in which cannabis is highly demonized, feared, and misunderstood. However, with information spreading quicker than ever and the ability to communicate easier than ever before with people all over the globe in addition to easier ability to travel, the truth and history about cannabis is rapidly spilling out and a paradigm shift is underway.

The Endocannabinoid System

- One of the largest networks of receptors in our body, and the second largest neurological system in our body after our nervous system.
- We all have an Endocannabinoid System! Even our pets! Dogs, cats, cows, pigs, horses, all other mammals, as well as birds, fish, and reptiles.
- **This system is responsible for maintaining homeostasis and optimal functioning within the body.**
- The receptors that make up the Endocannabinoid System communicate with every major organ we have, hence why cannabis seems to be so miraculous in treating such a wide variety of ailments. These 'miracle' stories often leave some people wondering, 'How could that be? How could cannabis possibly do that or help with that?' By understanding and learning more about the Endocannabinoid System and our biological connection to the natural world, one can realize how such seemingly profound healing can take place.
- Our own bodies naturally produce some of the same chemical compounds that cannabis produces. These compounds are called cannabinoids. We even produce our own 'bliss molecule' that is very similar to THC, called anandamide.
- When an individual is not producing enough of their own endocannabinoids, the cannabinoids from cannabis called, phytocannabinoids, are some of the most effective natural resources that could safely and most directly correct the deficiency without the slew of negative side effects that we see with many of today's synthetic pharmaceuticals. Just like you would take a vitamin supplement or seek foods rich in that vitamin if you were deficient in a particular vitamin, you could utilize the cannabinoids found within cannabis to promote wellness and optimal functioning of your endocannabinoid system to naturally treat various ailments, deficiencies, imbalances, and diseases.
- We are finding many common illnesses could actually be an endocannabinoid deficiency, meaning the individual's endocannabinoid system/endocannabinoid production has been compromised by toxic environmental factors and/or unhealthy lifestyle. This means that the individual is not producing enough of their own cannabinoids, called endocannabinoids, to keep their body running optimally. As described above, endocannabinoids are our own body's natural production of cannabinoids that help keep us at optimal functioning. When production is deficient, it can show up as a disease or ongoing ailment, and we are witnessing people having incredible success correcting this issue by incorporating cannabinoids found within cannabis into their diet/lifestyle/wellness regimen.

- Specific disorders having success with cannabis/cannabinoid treatment - Damn near all of them! Short of having a malfunctioning heart or other organ that just outright needs replaced or a situation of the like where surgery or an invasive procedure needs to happen because the disease has gone so far, cannabis and cannabinoid treatment can address most ailments and diseases society is facing today.
- Through science, research, and actual patient experiences, we have found cannabis/cannabinoids can help neurological disorders like Parkinsons, MS, Alzheimer's, dementia, tremors, seizures, and autism, and autoimmune diseases like lupus, IBD, diabetes, graves disease, psoriasis, and arthritis, and mood/behavioral disorders like ADHD, depression, and anxiety. Cannabinoids also have the ability to kill cancer cells without damaging any of our healthy cells. Almost anything you can think of that we diagnose could be addressed with cannabinoid therapy and attention to diet, exercise, and spiritual/emotional/mind-body-soul wellness. Very rarely do synthetic pharmaceutical pills or invasive procedures actually have to happen, but these have been the go-to suggestions and direction of the medical industry for decades. And why would that be? Because pharmaceuticals and medical procedures are highly profitable, and they feed the insurance and big pharma machines who have been ruling the healthcare system for 50+ years.
- While the Endocannabinoid System is vital in maintaining human health and has been known about in science and research for decades, it has been left out of the American Medical Association curriculum due to its connection to the cannabis plant which has been a schedule one substance for just over 80 years. Meaning, this previously accepted and widely used medicinal plant somehow got deemed by our government to have no medical value, have a high risk of abuse, and therefore could not be eligible for research. Doctors across America are not educated or often not even aware of the Endocannabinoid System or the science of cannabis and how it works within the body. This creates a major disconnect in the ability of patients that have explored or want to explore cannabis as medicine to effectively communicate with their doctor about the subject. Without being empowered by education/the facts, most doctors believe cannabis is just an illicit drug that should be stayed away from, and they are trained to believe this. The positive side is more and more doctors are opening up to this subject and supporting their patient's choice to use cannabis as medicine as they witness the success the patient is having with it and take the time/effort to educate themselves about the subject.

Cannabinoids

- Cannabinoids are the active compounds found within cannabis that communicate, interact with, and/or bind to the receptors of our Endocannabinoid System.
- Cannabinoids are found in the balloon-like structures that cover the flowers and leaves of the plant called trichomes. Trichomes are the structures that make the flower and leaves sticky/resinous and make them look crystalline.
- THC is the most well know cannabinoid that has been the most popular due to it being the cannabinoid responsible for the psychoactive 'high'.
- However, that is changing as we dive deeper into our understanding of this plant, how it works, and its vast potential for medicine and healing, both in the treatment sense and as preventative medicine.
- Through science and research, we continuously learn more and more about not only the incredible amount of individual compounds that the variety of cannabis strains produce, but the synergistic efficiency of these compounds working together, known as the 'entourage effect'.
- There are numerous cannabinoids already discovered, but we will likely only continue to discover more as we catch up on 80+ years of missed research.
- Current cannabinoids, aside from THC, that are gaining popularity and being studied more and more are CBD, CBN, CBC, CBG, THCa, THCV, CBDA, and much more to come!

- Although other cannabinoids don't produce a high like THC, they are all technically psychoactive since they do change brain chemistry when consumed. A good term to use for other cannabinoids that have medicinal applications, but not the high associated with THC, would be 'non-intoxicating' or 'non-inebriating'.
- All cannabinoids currently known and researched have some psychological and/or somatic effect on the brain and body, (somatic meaning relating to the body as distinct from the mind), and are shown to contain therapeutic and medicinal properties that can be applied to medicine, health, and wellness.
- **Due to cannabinoids working within our endocannabinoid system (whose function is to maintain homeostasis), cannabinoids have the incredible ability to return balance and optimal functioning to our body and correct various imbalances or deficiencies we may have or develop.**

In science and research, **CBD** has been shown to:

- relieve pain
- kill or slow bacteria growth
- reduce blood sugar levels
- reduce vomiting and nausea
- reduce seizures and convulsions
- reduce inflammation
- reduce risk of artery blockage
- inhibit tumor growth and cancer cells
- nervous system protectant
- suppress muscle spasms
- relieve anxiety
- modulate the immune system
- reduce spasms in small intestine
- be tranquilizing and antipsychotic

In science and research, **CBDa** has been shown to:

- reduce vomiting and nausea
- reduce inflammation
- inhibit tumor growth and cancer cells

In science and research, **THC** has been shown to:

- relieve pain
- reduce vomiting and nausea
- reduce inflammation
- aid sleep
- inhibit tumor growth and cancer cells
- nervous system protectant
- suppress muscle spasms
- relieve anxiety
- stimulate appetite

In science and research, **THCa** has been shown to:

- reduce vomiting and nausea

- reduce seizures and convulsions
- reduce inflammation
- inhibit tumor growth and cancer cells
- suppress muscle spasms
- reduce spasm in small intestines

In science and research, **THCv** has been shown to:

- relieve pain
- suppress appetite
- reduce seizures and convulsions
- relieve anxiety

In science and research, **CBG** has been shown to:

- kill or slow bacteria growth
- reduce inflammation
- inhibit tumor growth and cancer cells
- relieve anxiety

In science and research, **CBC** has been shown to:

- relieve pain
- reduce inflammation
- inhibit tumor growth and cancer cells
- relieve anxiety

In science and research, **CBN** has been shown to:

- relieve pain
- suppress appetite
- kill or slow bacteria growth
- aid sleep
- suppresses muscle spasms

Fun Facts/Things to Consider

- Cannabinoids are non-toxic and non-lethal to the body. Proven to be neuroprotectants and antioxidants by our own U.S. Government during research they did in the late 90's/early 2000's. You can google U.S. Patent #6630507.
- Cannabinoids are not just found in cannabis! As mentioned above, not only do our own body's produce cannabinoids, (we've even discovered cannabinoids in human breast milk! Meaning cannabinoids are so nourishing and life and immune supporting that mothers naturally produce them in their breasts to feed to their infants), cannabinoid production can also be triggered by consuming certain foods and doing particularly enjoyable activities. Essential fatty acids, cacao, herbs, spices, and tea can naturally stimulate our endocannabinoid system. Beta-caryophyllene is a terpene found in black pepper, lemon balm, hops, cloves, cannabis, oregano, cinnamon, and several other herbs that selectively stimulates the CB2 receptor, which is a sought-after property to treat inflammatory disorders. You can promote endocannabinoid production in your body by eating the following foods; black pepper, rosemary, turmeric/curcumin, kava, maca, cacao, black truffles, echinacea, and flax seeds, and the following foods are sources of endocannabinoid enhancing fatty

acids; hemp seeds, hemp oil, flax seeds, flax oil, chia seeds, walnuts, sardines, anchovies, and eggs (pasture-fed or omega-3 enriched only). You can also activate endocannabinoid production by exercising and doing a physical activity you truly enjoy. If you force yourself to do a workout or physical activity that is not enjoyable to you, your body interprets that as stress rather than a positive boost to your endocannabinoid system so be creative and true to yourself for ways to be active and don't force yourself to do physical activities you don't enjoy, opt for ones you do enjoy.

- Other endocannabinoid-enhancing and health-promoting activities: Social interaction, unstructured play time (just as important for adults as it is kids!), meditation, yoga, massage, breathing exercises, and any voluntary and enjoyable exercise that brings you joy.
- Cannabinoids are life-promoting and balancing, but there is a flip side. Should a person over use cannabis when their body or mind doesn't really need a high amount of extra cannabinoids medically speaking, this can cause imbalance and disruption to the endocannabinoid system and other systems that the endocannabinoid system communicates with. Learning where your actual needs are with cannabis and using it mindfully, respectfully, and paying mind to how it was grown/where it came from is the key to a health-promoting, empowering relationship with cannabis. The good news is organic cannabis is not lethal. So while you can misuse and abuse it (just like anything else on the planet) and possibly experience a negative side effect, at least that negative side effect is not death, and in this aspect, cannabis is significantly safer than numerous substances that are readily available, legal, and widely accepted all over mainstream society.
- The most dangerous thing about cannabis is that it was made illegal. This didn't stop people from growing it or using it, and instead forced secretive indoor production which took cannabis out of its natural environment where it is most natural and safe for consumption, and placed it inside where it started being grown inorganically and highly manipulated. Making it illegal also denied society a good education and understanding of cannabis which lead to people not being aware of how to properly grow or consume cannabis which are both things that make a huge difference in how safe and health-promoting it is.
- Misusing or abusing anything can lead to negative consequences and possible imbalances/disruptions, even if that thing is like cannabis and typically life/health-promoting. So while cannabis and the varying compounds it produces are traditionally very health-benefiting and promote homeostasis, it is possible for an individual to create unhealthy habits with cannabis to a point it may causes imbalance and disruption to optimal health and functioning. **Mindfulness and conscious consumption is vital to health, wellness, and optimal functioning, no matter what the subject/substance is.** That can go for cannabis, food, electronics, household products, anything that is consumable.
- Due to the varying compounds and strains of cannabis, it is possible to consume a strain or variety of compounds from the plant that simply do not agree with you. If you have tried a cannabis product once and the experience wasn't what you were going for, try again with a different method of consumption, serving size, or different strain. With so many various compounds and ratios of those compounds available in cannabis, you are bound to find the right strain/cannabinoid profile that works for you.

Terpenes

- Terpenes are the naturally occurring compounds in cannabis (and other plants) that are responsible for its particular aroma.
- As mentioned, there are numerous cannabis strains/various genetics. Each cannabis strain can have a completely different terpene profile causing vast differences in the way each strain smells and even feels physiologically when consumed. Various smells can be fruity, earthy, peppery, skunky, piney, citrusy, etc, and terpenes are responsible for these varying smells.

- Terpenes are not unique to cannabis. Terpenes can be found in many plants, like your everyday fruits, vegetables, and herbs. Think about the cleansing/invigorating aroma of a citrus fruit. Can you think of a time when you inhaled cannabis, and it had an invigorating lemon or lime smell? That smell was coming from that strain's particular citrus terpenes called limonene, just like the naturally occurring compounds found in a lemon or other citrus fruit. Linalool is the terpene found within lavender that is responsible for lavender's anti-anxiety and calming effect. Linalool is also found in certain cannabis strains. As you can imagine, there is a different physiological effect when consuming a cannabis strain with linalool than consuming a cannabis strain with limonene. The strain with linalool might make you feel calm, relaxed, easy going, maybe even sedative, while the strain with limonene could make you feel uplifted, focused, motivated, and even energized.
- We have discovered through science and research that it is the cannabinoid and terpene profile/combination that gives you the best idea of what physiological effect you will have with a particular strain, meaning terpenes play just as big of a role in how you feel when consuming cannabis as the cannabinoids do.
- Knowing more about terpenes helps you pick the right cannabis strain for the particular effect you are seeking.
- The nose knows! If you are ever having a hard time choosing a cannabis strain, smell the options and choose the one that delighted your nose the best.
- This is one reason the cannabis plant is so special and unique in the way it can be catered to exactly what you need it for. With hundreds of combinations of cannabinoid/terpene profiles that exist in cannabis, you can find the cannabinoid and terpene combination that works for you.
- With cannabis coming out of the illicit market and into a legitimate, respected, studied resource for health and wellness and personal freedom, we can all be more empowered to pick the right cannabis strains, products, and cannabinoid/terpene combinations that work for our particular wellness needs.

Flavonoids

- Flavonoids are responsible for each cannabis strain's particular flavor. (Terpenes add to this flavor, just like food. The various smells of food activate our senses and aid in how we taste the food. Terpenes and flavonoids go hand in hand in our sensory experience with cannabis.)
- Much like everything we talked about with terpenes, similar can be applied when discussing flavonoids.
- One flavonoid might resonate with you more than another.
- One flavonoid might be more therapeutic to you than another.
- Observing yourself after consuming different flavors (strains) of cannabis can help you determine what flavonoid profile serves you best.

Methods of Consumption

- Each method of consumption affects each individual differently.
- There is no 'one size fits all' to cannabis consumption. It is a very personal use plant that can be catered to anyone's personal health and wellness needs.
- Some people and animals will respond to cannabinoid therapy right away, experiencing positive and even profound effects after just one serving, while others may not notice the benefits until they have consistently incorporated it into their lives/diet for a couple weeks or even a couple months. As cannabinoids work with our endocannabinoid system to promote optimal functioning and wellbeing, it might take consistent, daily use, like taking a daily vitamin or being consistent in a new diet or workout routine, before some humans or

animals see/notice/feel the benefits and improvements to their system and functioning as it may take time for their system to rebalance, replenish, and improve.

- It is also possible for certain methods of consumption and certain cannabinoid ratios to work better for you than others. The best way to find what works for you is just trial and error and consistently assessing yourself along the way. Buy low doses of products at first so you can see how you respond to them, and if you find you need to take the low dose often to get the effect or relief you are seeking, you'll know to buy a higher dose/higher concentration next time. Pro tip - keep a journal or an ongoing note to track your success, failures, likes, and dislikes as you try various things. Perhaps you didn't like the way a particular brand made you feel. Perhaps a certain dosage, strain, brand made you sleepy while another dosage, strain, brand made you motivated. You can even track onset (when you began to feel the effects) and how long it lasted you. Make note of these details to help track what works for you, what doesn't, what you liked, didn't like, etc.
- Smoking: Effects of smoking are felt the quickest, but fade away faster than other methods of consumption. Smoking is ideal for whole plant herbal therapy and fast relief. Many find therapy just engaging with the plant in this way; touching it with their fingertips, breaking it up to roll a joint or put in a pipe/bowl to smoke, and simply smelling the aroma as it is broken up. Connecting with the plant in this way is very therapeutic for many and why it is the chosen method of consumption for so many people.
- Edibles: Edibles are digested and processed through the liver. Effects of eating an edible can take 1-2 hours to fully kick in. However, this does vary drastically between each consumer and has to do with many variances such as your overall tolerance to cannabis, what you ate that day, your metabolism, the type of edible you consumed (was it oil based, butter based, etc), your genetic makeup, current state of health, and DNA structure to name a few. It is always best to start low, assess yourself, and go from there. Some people can eat and handle incredibly high doses of edibles (hundreds or even a thousand milligrams) while 5 to 10 milligrams (or less) is appropriate for others. You can always eat more of an edible, but once you've eaten too much past your comfort zone or what's appropriate, only time to allow the edible to wear off can undue the mistake. Don't worry, you won't die from eating too much of an edible, but you can have a very unpleasant experience if you eat too much past what is appropriate for you and your comfort level. Always consume low and slow and from a trusted source to avoid an uncomfortable/undesirable experience with edibles and cannabis in general. Edibles are wonderful and effective medicine, but proper dosing is key.
- The effects of edibles last much longer than smoking and are known for being stronger than the effects of smoking. This is why edibles are ideal for chronic pain patients. Chronic pain patients can get hours and hours of relief from edibles.
- You can alter how long an edible lasts and how strong it is by the dosage. For example, if you microdose with THC edibles, (microdose often refers to 1 to 5 milligrams of THC), the effects will not be as strong or as long lasting compared to eating a higher dose. Generally speaking, even if you have never consumed cannabis/THC before, even the most novice of people can handle and feel great off of 1 to 3 milligrams of THC without having any sort of negative side effect or a 'scary' or overwhelming experience. Microdosing is a wonderful approach for beginners.
- Microdosing can be a very effective form of preventative health care and maintaining wellness, much like taking vitamin supplements, staying active, or eating a well-balanced diet to stay on top of your overall health each day. Giving your body a fairly consistent microdose of cannabinoids helps support your endocannabinoid system, thus supporting optimal functioning and balance of your entire body, including mental sharpness. (Did you know people who consume cannabis have been shown to have less cases of Alzheimer's and dementia compared to their non-cannabis consuming counterparts?)
- When it comes to edibles, the current industry standard serving of THC in Colorado is 10mg. You will find on the recreational side, no THC edibles go over 100mg, and inside that 100mg edible, clear sections to separate the edible into 10mg servings, or even 5mg or less, will be

visible for responsible use and appropriate servings. This promotes responsible dosing and helps prevent eating too much.

- On the medical side, you will find there is no limit to the milligrams offered in edibles. This is one of the perks, aside from pricing and taxes, of obtaining your medical card in Colorado. Some medical patients have conditions that require significantly higher doses of edibles than you can find on the recreational side.
- Sublingual: This method of consumption is done under the tongue and is faster acting than eating an edible. By consuming sublingually under the tongue, the cannabinoids are going directly into your bloodstream and are able to act on your endocannabinoid receptors more quickly than if you had ingested an edible and had to wait for that edible to break down, digest, and process through the liver.
- Sublingual is good for those that cannot or do not want to smoke or do not want to wait for edibles to take effect. Some people's conditions prevent them from eating normally so sublingual consumption could be the most realistic and ideal option for them.
- Other methods of consumption include: topicals, patches, ointment/salve, lotion, balm, soft gels, pills, capsules, suppositories, concentrated cannabinoid extracts, and vaporizing concentrates or flower. You can find cannabinoid products in Colorado in almost any method of consumption you can think of. The variety is excellent for catering to everyone's wide array of needs/circumstance.

Food is Medicine!

- Hempseeds! – Considered a superfood, hempseeds are a complete plant protein packed with essential vitamins and nutrients.
- Hempseed Oil – Incredibly therapeutic oil, great to eat or use on skin
- Leafy Greens - Including the leafy greens of cannabis! Did you know the fan leaves of the cannabis plant are packed with vitamins and nutrients?
- Herbs
- Spices
- Fruits
- Vegetables
- Nuts
- Seeds
- Animals and animal products (like dairy) that were not raised on a factory farm!

Mindful/Conscious Eating

- Remember that food is medicine and what you eat each day has the ability to promote your body's natural ability to heal and be well or it can aid in hindering your body's ability to heal and be well.
- Try not to inhale your food or eat mindlessly (like mindlessly eating in front of the tv, not paying much attention to how much you are consuming). When we inhale our food, we hinder the digestive flow that starts in the mouth as soon as we begin salivating and chewing. Eating food too quickly can result in discomfort, an upset stomach, and feelings of lethargy (sluggish, lacking energy, apathetic). Honor your mind, body, spirit, and the nourishment you are consuming by bringing mindfulness to your meals and consumption habits. Take notice of any stress eating habits you may have and learn to manage stress in a way that doesn't leave you feeling crummy/depleted after. Mindful practices like breath work, yoga, meditation, journaling, talking with a loved one/someone you trust, and exercise are excellent, tried and true tools for managing stress.

- Reduce consumption of preservatives, synthetic dyes, added/refined sugars, processed meat and cheese, factory farmed meat and dairy, and things packaged in a ton of plastic.
- Try to consume more natural whole foods from the earth rather than too many prepackaged modified foodlike products.
- Connect deeper with all you consume by sourcing food locally or from small farmers or growing some yourself!
- Buy organic, local, and small business when possible. Spend a little extra to invest in your wellbeing and improve how you feel and function because it is an investment very much worth making. How you care for yourself now and the healthy/life-promoting habits you groom now help set you up for significantly more pleasant and functional aging years. If you don't make time or care to invest in your health and wellbeing now, you will likely have to make time and money in the future to care for whatever ailment, disease, or illness develops along the way. You can delay onset and reduce your risk of all of these things by practicing mindfulness, being a conscious consumer, using food as medicine, and playing an active role in your mental and physical wellbeing and how you feel each day by operating in alignment mind, body, and soul and making conscious decisions out of a place of empowerment, love, and awareness.

Anti Inflammatory Foods

- Antioxidant rich foods, minerals, and essential fatty acids are the three main categories that can attack inflammation at the source. Much of our physical pain and various ailments that arise are due to inflammation so eating foods that are naturally anti inflammatory can help support us feeling and functioning our best.
- Fruits and vegetables - leafy greens, kale, broccoli, bok choy, celery, cherries, strawberries, pineapple, beets, blueberries (always buy organic and wash all produce well before eating it!)
- Beans
- Turmeric
- Ginger
- Nuts and seeds - hempseeds, chia seeds, flax seeds, walnuts
- Extra virgin olive oil
- Coconut oil
- Hempseed oil
- Oily fish and fish oil from cold water fish like salmon, herring cod, trout, sardines

High Antioxidant Foods to Support the Immune System & Cellular Function

- Fresh fruit (especially berries) and veggies
- Leafy greens
- Bone broth
- Probiotic rich foods like yogurt (ideally raw goat's milk yogurt - make sure the yogurt you buy isn't packed with a bunch of sugar)
- Fermented vegetables like sauerkraut and kimchi
- Oregano
- Garlic
- Varieties of medicinal mushrooms - turkey tail mushrooms, lions mane, tremella mushroom, maitake mushroom, shiitake mushrooms, cordyceps mushroom, reishi mushrooms, and more (I could write a whole page on mushrooms and how important fungi is to this planet! I encourage you to research their profound health benefits and eat more mushrooms!)

Foods Rich in Vitamin C

- Aside from being excellent sources of antioxidants that can help reduce the risk of chronic disease, the following foods rich in vitamin C may help lower high blood pressure and risk of heart disease.
- Strawberries
- Mangos
- Sweet peppers
- Chili peppers
- Kale
- Pineapple
- Kiwi
- Grapefruit
- Cauliflower
- Broccoli
- Brussel sprouts
- Guava
- Papaya
- Cantaloupe

Mindfulness, Breath Work, and Conscious Consumption of Cannabis

You can use the ancient combination of cannabis and yoga to strengthen connection and attunement of the mind, body, and spirit. Cannabis and yoga help groom mindfulness and healing of the mind, body, and spirit. Mindful breathing techniques can be used to inhale cannabis and dramatically increase the healing experience. Deep breathing exercises, with or without cannabis, are an incredible (and free!) tool we all have and can tap into at any time to activate our parasympathetic nervous system (the rest and digest system). This is where healing, understanding, love, and compassion are restored and a calmer, zen state can be achieved. The physical benefits of activating the parasympathetic nervous system are slowing down the heart rate, slowing down racing thoughts, reducing overwhelming anxiety, panic, and anger, increasing intestinal and gland activity, and relaxing sphincter muscles and gastrointestinal tract. All of this helps optimal flow and function of our internal systems and helps reduce blockages, both in the physical and spiritual sense. Just like we could develop digestive blockages that lead to disease and ailments, the same can be said for emotional blockages. Mindful and conscious expanding practices support our ability to digest emotions, thoughts, feelings, and experiences. The better we can process and digest our thoughts, emotions, feelings, experiences, and food, the happier, healthier, and empowered we will be to live this life to our greatest potential and fulfillment and help others do the same. Breath work is highly beneficial to our mental and physical wellbeing and is an ancient practice that has become a bit lost in today's world. **Breath work, meditation, yoga, and plant medicine are all ancient tools that have been used for wellness for thousands of years. Remembering these practices and returning to them is incredibly empowering and healing.**

Sourcing Matters!

The sourcing and treatment of the plant during growth and processing makes a huge difference in the safeness, medical value, and integrity of the product you are consuming. Whether it be CBD oil, a cannabis strain you plan to smoke, an edible product, or anything related to cannabis, know your source! Do your research and be an informed consumer before you buy. Look for real reviews, real people's experience with the products, lab results/COA's (certificate of analysis), take notice of whether or not the company is hard to locate or get ahold of (not being able to easily contact/locate them could be a red flag), ask/find out where the plants were grown (look for U.S. grown plants, preferably grown and cared for organically without the use of toxic pesticides). Learn to recognize the people and businesses that are after your money and hopping on the CBD or cannabis train for profit rather than out of a real passion or care for the plant and planet/human/animal health and welfare.

Cannabis: The Exit Drug!

We have seen a reduction in opioid overdose in states with access to legalized cannabis. Instead of being prescribed an addictive opioid right off the bat after an accident, injury, or surgery, some people are able to skip getting addicted to opioids by utilizing cannabis and cannabinoid products to **manage pain and promote the healing process**. While cannabis can be habit forming for some, it is not physically addictive in the way opioids are, and its plethora of naturally occurring therapeutic compounds can effectively treat inflammation to help manage pain making it a safer alternative to toxic substances that do have risk of physical addiction and overdose. The compounds found within cannabis can also safely and effectively help address the symptoms of withdrawal to help people wean themselves off of toxic substances including alcohol, nicotine, anxiety pills, pain pills/opioids, meth, and heroine.

Organic, earth-provided cannabis is a safe and natural life promoting herb that should have never been taken out of our natural medicine cabinet and food web. Cannabis helps promote wellness and wellbeing just like eating your herbs, fruits, and veggies and excersing your mind and body.

Thank you so much for your interest and willingness to educate yourself and others on cannabis and plant spirit medicine!

*This information is for educational purposes only. Brought to you by cannabis activist and educator, Alayna Adair, aka LaynieGanja, who seeks to return empowerment to the people by remembering that we are the ultimate keepers of our health, happiness, and greatest potential. I am not a doctor, just a human being working to improve quality of life for all on earth through mindful practices, conscious expansion, and our innate biological and spiritual connection to the natural world. The above information is a collection of insight I have learned along my own wellness journey and personal experiences with others including patients, researchers, and health professionals.

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Peace, love, LaynieGanja <3

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