

MODERN REMEDY
CBD INFUSIONS



THE ULTIMATE CBD HANDBOOK

PAST PRESENT AND FUTURE OF CBD

BY MODERN REMEDY

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Medical Disclaimer: The following information is intended for general information purposes only. Individuals should always see their health care provider before administering any suggestions made in this ebook. Any application of this material set forth in the following pages is at the reader's discretion and is his or her sole responsibility.



Introduction to the CBD Handbook

Cannabidiol, more popularly known as CBD, is derived from the hemp plant. It is a non-intoxicating phytochemical that has long been associated with a myriad of health benefits. In this handbook, we'll discuss what makes CBD unique from other chemicals contained in the hemp plant and explore the evidence related to its impacts for health. Perhaps owing to the compound's popularity, it is the subject of a growing body of medical research. As scientists continue to study CBD and the hemp plant, they may uncover yet more applications for their use in the pharmaceutical sphere.



Why Is CBD Sometimes Associated with the Marijuana Plant?

While there has been some confusion relating to the hemp plant and marijuana plant, it's easily clarified. The hemp plant is a cousin of the marijuana plant, so the confusion relates to these plants' classification, names, and chemical makeup. Hemp plants contain more CBD than marijuana plants, which contain some CBD. Conversely, marijuana plants contain more delta-9-tetrahydrocannabinol (THC), the chemical responsible for marijuana's high, than hemp plants. Hemp does not contain enough THC to cause even mild intoxication. The two chemicals simply happen to be present in both plants in widely varying degrees along with some 400 other phytochemicals.

Because this compound can also be derived from marijuana as well as hemp, it is often misunderstood even as products containing this compound can now be found everywhere from grocery stores to coffee shops. CBD is not associated with a potential for substance dependence.

Moreover, pure CBD and its use demonstrate no evidence of being a threat to public health in any shape or form. On the contrary, it offers great promise as a pain relieving agent (and alternative to dangerous opioid painkillers), stress reliever, and much more.

A decorative desk with an open book, a lamp, and a wooden box. The desk is light-colored wood with drawers. The background features a dark wall with white floral wallpaper and a dark tufted headboard.

How to Use This Handbook

We've divided this handbook into three sections. First, we'll examine CBD and its use as a medicinal treatment since neolithic times. CBD's history in association with alternative medicine is closely tied to the cultivation of hemp. We'll discuss the role of hemp in traditional and alternative medicine practices throughout history. Many of CBD's current uses are influenced by centuries of anecdotal evidence that modern science is now investigating.

Next, we'll delve into the current research and evidence for hemp-derived CBD and its many health benefits. Scientific researchers have found that CBD can enhance both physical and psychological health with its powerful medicinal properties. Because hemp is natural and easy to cultivate, there is reasonable urgency among the public to plumb the depths of this compound and learn all that it may be capable of in terms of supporting human health.



Finally, we'll examine some of the legal issues surrounding hemp and CBD products as well as the next generation of CBD research that is on the horizon. CBD is not a cure-all or able to live up to all the claims that suggest its extraordinary power. This handbook will focus on the most compelling scientific evidence that supports CBD's health benefits. As research continues, it's very likely that more of this compound's health benefits will surface. For now, we'll provide a current overview of CBD's efficacy as supported by research. Where evidence is more or less anecdotal, we'll label it as such so that readers can obtain an accurate look at this compound in order to understand its strengths as a pharmacological therapy.

Use our guide to help you determine if CBD products can support your individual health needs. Before engaging in the use of any chemical compound, consult your healthcare provider, especially if you are taking any types of medications. CBD is generally hailed as a safe compound, but many questions related to dosing and efficacy relative to specific health conditions may still be a subject of ongoing research.

A History of Hemp



Historians surmise that hemp is likely one of the oldest plants to be cultivated. Its use dates back to the Neolithic period in China. Its use for making textiles, paper, rope, and shoes eventually spread to other parts of Asia and beyond. Hemp became one of the most cultivated plants in the Middle East and Europe. In fact, Christopher Columbus's ships used ropes made from hemp. By 1545, the Spaniards had introduced hemp cultivation to the Peruvians, and the plant's fame then spread throughout the New World.

Archaeologists, according to MIT, believe that hemp cultivation is likely the "oldest example of human industry." Economies of the ancient and medieval periods place tremendous social value on hemp production--and for good reason. As shipping industries developed, the need for rope and sail of reliable quality only increased, especially by the Renaissance as ships began to travel much further in search of new trade opportunities. It was, of course, the era of great exploration. Hemp was not only several times stronger than cotton, it is also resistant to salt water, making it the best choice for ship and sail makers.

Colonists moved hemp cultivation with them to North America. For generations, hemp competed with cotton. However, once Eli Whitney invented the cotton gin, the ease of producing cotton and the difficulty associated with hemp harvesting allowed cotton to become the king crop for early Americans. Hemp cultivation declined because it was more expensive to cultivate than many other crops and left producers with less profit.

However, hemp continued to be a staple crop among U.S. farmers for throughout the eighteenth and nineteenth centuries. It wasn't until the 1930s and the invention of new petroleum-based synthetic fibers that hemp production faced its most significant threat. About the same time, the passage of opium and narcotics acts banned the cultivation of many plants, including hemp because of its relationship to the marijuana plant. The petroleum and textile companies and their burgeoning lobbies were eager to lend their support for the ban of hemp as it was their greatest economic adversary.

So, in spite of all the good hemp had brought to early America and, of course, peoples stretching back to the Stone Age, it was sidelined because of its marijuana cousin. In many other parts of the world, of course, hemp continued to be produced. Today, it is enjoying a resurgence in the U.S. because of its medicinal properties and other industrial uses.



Hemp in Traditional and Alternative Medicine



The history of hemp as a medicinal agent also dates to ancient China. The first recorded use of hemp used in medicine dates to 2737 BCE and the Emperor Shen-Nung. The emperor favored a medicinal tea made from hemp oils for pain relief. This emperor was so impressed by the plant's medicinal properties that he also chronicled the stems, leaves, and flowers and their medicinal qualities too. The ancient Chinese relied on hemp to treat many health complaints such as tapeworms, hair loss, gout, malaria, and even blood clots. It was used in cases of difficult childbirth and rheumatism.

The Romans were also impressed by the medicinal properties of hemp. They used its oils to treat earache, stomach pains, and burns. In nearby Palestine and surrounding regions of the same period, hemp was used as an anti-inflammatory and pain-relieving agent. Interestingly, the use of hemp as an anti-epileptic treatment also dates to this era.

Ancient Egyptian papyrus show how hemp was used to create a medicinal eyewash while in India, regarded as a 'sacred grass' and fashioned it into healing pastes and salves to sooth pain and encourage healing.

Of all the ancient uses for this dynamic plant, pain relief was the most popular, and culture after culture favored hemp in the treatment of pain. And even with the passage of time, hemp's favor among medical practitioners of the Middle Ages and Renaissance only increased. In Europe, physicians used hemp to treat chronic coughs and even tumors. Hemp was so in demand in England that Henry VIII commanded farmers to grow it or be taxed with a fine.

In America, colonists dating to the time of Jamestown cultivated hemp for both use in textiles and sail making but also to treat various ills. While hemp continued to be used to treat pain and various other health complaints (i.e. coughing, skin inflammation), it also became popular as a treatment for mental health disturbances it was recommended by Robert Burton in his classic work, *Anatomy of Melancholy*.

The 3rd edition of the U.S. Pharmacopeia, published just before the Civil War, recommends the use of hemp to treat various health complaints. During this time, doctors prescribed hemp to treat convulsions, gout, migraines, tics, and depression. However, hemp as a medicinal agent began to decline with the introduction of opioids, which provide far greater pain relief. Nevertheless, hemp remained a popular home remedy among people in the U.S. for decades after the Civil War. Unfortunately, scientists have only lately begun to formally study hemp's medicinal properties, leaving modern medicine playing catch up to 'rediscover' what the ancients appeared to know quite well.



Hemp, the Endocannabinoid System, and Modern Medicine

Today, clinicians are revisiting many natural and traditional remedies to treat various health conditions and associated symptoms like pain and inflammation.

The explosion in popularity of hemp has led many businesses struggling to keep up with public demand for hemp-based products designed to support everything from nutrition to stress relief. But to understand why hemp is so valuable to modern medicine requires a deeper dive into the human brain and body, specifically, to the endocannabinoid system.

According to an article published by the journal *Cerebrum* and archived by the National Center for Biotechnology Research and National Library of Medicine, the endocannabinoid system “is one of the most important physiologic systems involved in establishing and maintaining human health.” This system was so named because of the plant involved in its discovery.






According to medical research, endocannabinoid receptors are found throughout the body. These receptors are located in the brain, our organisms, glands, and connective tissues. They even exist in immune system cells. Scientists view these receptors as a bridge between our body and mind. Regardless of their name and whether or not a person ever takes CBD or related chemicals, they exist in the body.

Scientists have discovered that these receptors play a role in many mental and physiological processes such as sleep, appetite, memory, mood, and even reproduction. They have also linked these receptors to conditions like chronic pain, inflammation, cardiovascular function, and stress. Experts believe that the endocannabinoid system is crucial to the body's ability to maintain homeostasis, our stable internal environment.

Consequently, modern clinicians view CBD and its potential to treat various aspects of health in relation to the endocannabinoid system. How this chemical reacts with the endocannabinoid system is at the root of its efficacy to treat many conditions and, conversely, inefficacy to treat others. CBD is not a cure-all, but where it is effective, medical researchers want to know and understand how it's able to provide relief.



How Does CBD Work in Relation to the Endocannabinoid System?

Many plant-produced molecules have the power to “manipulate human biochemical circuitry,” as stated in a health report published by The New York Times. Of course, modern medicine relies on this manipulation for a host of plant-based drugs produced to treat a plethora of human health conditions. While cannabinoids like CBD feature antibacterial and antifungal properties, scientists still aren’t clear about how they interact with the body’s cannabinoid receptors to target aspects of physiological health.

Yet, even without clarity, it is clear that people have used CBD with very few if any side effects to achieve relief from many different health complaints. Scientists do know that CBD is able to interact with the body’s native cannabinoid receptors and that this triggers positive results at the molecular level that translate into ‘feel good’ relief for people who have conditions like skin inflammation, anxiety, pain, and other health conditions.



Many plant-produced molecules have the power to “manipulate human biochemical

Scientists are now beginning to equate endocannabinoid receptors with the body’s feel-good endorphins. For decades, medical researchers have described how exercise triggers the release of these endorphins to heal sore muscles. The endorphins flood the body and brain, so they actually enhance mood, as well. Of late, researchers have also seen that the body triggers endocannabinoid receptors during exercise and they, too, appear to play a large role in the healing / feel good process--perhaps far more than previously thought.

So, the goal for current clinicians is to determine the extent that endocannabinoids are involved in the body’s healing and how CBD, which triggers these native receptors, can enhance health and healing even further. Likely, of course, there should be far more medical research about CBD, but it's D.E.A. classification made it extremely difficult for scientists to study until recently. Today, with fewer restrictions for study in place, researchers are clamoring to understand just how CBD affects the endocannabinoid system at the molecular level and to what extent (and dosing) it may be effective for treating the health conditions it is anecdotally known to help.



Hemp and the Brain

From a nutritional standpoint, hemp is good brain food. Before assessing how CBD addresses various psychological aspects of health, it's helpful to note just how nutritious hemp is to the brain and how its properties support brain health. "Hemp is a rich source of plant-based protein, and Omega 3 and 6 fatty acids. Hemp is also a good source of GLA (gamma linoleic acid)," according to Psychology Today. Foods that contain nutrients that support the brain support improved cognitive ability.

Researchers have been especially interested in how CBD can enhance brain health. According to the Surgical Neurology, "CBD research in animal models and humans has shown numerous therapeutic properties for brain function and protection, both by its effect on the endocannabinoid system directly and by influencing endogenous cannabinoids." The report continues by discussing CBD's antidepressant and neuroprotective qualities that support brain health.

However, one of the most important roles that CBD can play in terms of brain function is that of anti-inflammatory. Inflammation is associated with disease onset of numerous conditions. “Neuroinflammation” is linked to various neurological conditions, including epilepsy, anxiety, depression, stroke, and even Alzheimer’s disease. Preliminary research like the one posted in Surgical Neurology indicates that CBD actually slows the inflammatory response. Reduced inflammation means fewer symptoms or less severe symptoms.

Perhaps because it’s the first time that the FDA approved a drug containing CBD to treat a health condition, the drug known as Epidiolex is an oral medication designed to treat seizures that are associated with rare forms of epilepsy known as Dravet Syndrome and Lennox-Gastaut Syndrome. These forms of epilepsy are often quite severe. CBD has been proven to be effective for the treatment of these conditions. Epilepsy is a chronic neurological condition that can negatively impact a sufferer’s life. CBD has helped to reduce epileptic seizures most specifically in patients who are resistant to other epileptic drugs.



The anti-inflammatory properties of CBD may benefit people suffering from Alzheimer’s disease and other forms of dementia. While, at this point, no drugs containing CBD have yet been approved to treat Alzheimer’s disease, studies are underway to determine if CBD can help reduce the inflammation that causes brain cell decline. In the U.S., clinical trials are underway to determine how CBD can treat agitation associated with Alzheimer’s disease. Other medications designed to stabilize the moods of patients suffering from dementia are often fraught with unwanted side effects.

The hope is the CBD provides a positive calming effect without producing any notable side effects. Other studies associated with dementia and Alzheimer's may demonstrate how CBD's antioxidant properties help protect nerve cells from deterioration caused by oxidation. CBD has long been associated with improved memory and focus, so it's not surprising that researchers are trying to understand the benefit it may provide to people suffering from conditions that affect memory.

Then, of course, there many mood disorders that range from mild to debilitating. CBD may provide relief from symptoms of depression and anxiety. According to Psychology Today, "one study showed CBD could reduce social anxiety in a way comparable to ipsapirone and diazepam (valium) but, notably, without unpleasant side effects. Thus far, the studies showing that CBD benefits people suffering from mood disorders like anxiety have been small, but promising. Many people who have not been clinically diagnosed with depression or general anxiety disorder take CBD products simply to help them reduce stress and relax. CBD has historically been revered for its ability to induce calm.

Although it's not clear to the extent CBD may be able to help people suffering from severe mood disorders, it's possible given its performance in early studies, but more research is required.

In cases associated with preliminary studies, more research is needed in order to fully gauge the benefits that CBD has for brain health and the treatment of brain-related conditions like Alzheimer's disease or mood disorders such as depression. Nevertheless, many people find it comforting to note that the ancients relied on this plant to treat the same conditions we suffer from today, like depression, anxiety, and epilepsy.

In the course of this ebook, we'll discuss some of the research on the horizon for CBD and brain health.

CBD's Effects on the Body



The cardiovascular system is a research target among scientists who want to determine if CBD can benefit heart health. Scientists already know, for instance, that CBD “has direct actions on isolated arteries,” according to the [British Journal of Clinical Pharmacology](#).

According to the science, CBD might offer a real benefit for diabetic patients who are at increased risk for vascular damage. Researchers believe that CBD can help protect veins in a “high-glucose environment” according to this report.

In animals studies, CBD has been shown to increase blood flow in stroke models related to animals. The implications are, of course, that CBD may benefit stroke patients or people at risk for strokes.

How Exactly Can CBD Help the Heart?

Throughout this ebook, readers will find references to CBD and its anti-inflammatory properties. Inflammation is at the root of many health conditions and diseases such as coronary heart disease, stroke, and hypertension. Researchers have been interested to find out if CBD's anti-inflammatory potential can support heart health--specific aspects of heart health, including the prevention of heart attack. There's more. Scientists are studying the effects of CBD on rats after they've experienced heart attacks to determine if it has an effect on heart damage.

Recently, the FDA approved a "landmark COVID/Heart/Heart CBD clinical trial to be conducted by Cardiol Therapeutics. According to news reports, "the trial, designed by leading experts on inflammatory heart disease, will test the cardioprotective properties of cannabidiol (CBD) for COVID-19 patients with a prior history of, or risk factors for, cardiovascular disease." Medical practitioners know that contracting COVID can lead to serious complications for people who have heart conditions. The goal of the study is to determine if CBD can provide some cardiovascular protection for these at-risk patients.

There is also ongoing research to gauge the effects on CBD on animals with heart conditions like myocarditis and circulatory diseases. As these studies are being conducted for animals, it may be some time before researchers have accumulated enough evidence to involve humans, but the impetus is there, nevertheless.





Looking Northward: What Do Canadian Researchers Say?

The modern medicine community is not only based in the United States, of course. Many other nations such as Canada are home to top researchers who are examining CBD and its effects on human health. In Canada, there is news of CBD drugs created to treat some forms of heart failure, a condition that affects more than six million people in Canada and the U.S. Researchers developed the drugs based on what they learned about CBD's anti-inflammatory and anti-fibrotic properties in relation to the heart muscle.

Other International Research Related to Cardiovascular Health The British Journal of Pharmacology reported that "CBD is cardioprotective in the acute phase of I/R by both reducing ventricular arrhythmias and attenuating infarct size." Arrhythmias are problems related to heartbeat rhythms. Infarct relates to dead tissue. Moreover, the journal report continues, "The present study is the first to demonstrate that in the setting of myocardial I/R CBD can provide acute cardioprotection, in that it both suppresses ischaemia-induced ventricular arrhythmias and attenuates infarct size when given immediately prior to ischaemia onset."

Worldwide, according to the World Health Organization, "Cardiovascular diseases (CVDs) are the number 1 cause of death globally, taking an estimated 17.9 million lives each year." So, it's not surprising that there are numerous studies worldwide to determine if--and to what extent--CBD can offer preventative support or provide a treatment benefit to patients who have already contracted heart disease or experienced a serious heart problem like heart attack.



More Health Benefits of Hemp

We've discussed the potential health benefits that CBD may have for brain and heart health, but that's not all. Inflammation, in particular, is associated with many health conditions that affect numerous other areas of the body like the skin, joints, and gastrointestinal system. Can CBD offer a positive benefit for people suffering from other health conditions?

CBD and Skin Health

Users of CBD ointments and creams have reported reduced skin itchiness and dryness. According to *Dermatology Times*, the anti-inflammatory properties of topically applied CBD can have a positive effect on skin health. Moreover, people with any skin type can generally use CBD oils safely. According to a source for the report, Dr. Tina Alster, M.D., clinical professor of dermatology at Georgetown University Medical Center in Washington, DC.,

"Anti-inflammatory properties associated with CBD are beneficial in treating such dermatologic conditions as acne, psoriasis and eczema due to reduction of dryness, irritation and redness. CBD-containing creams, oils, gels and serums not only moisturize and soothe the skin but are also showing encouraging results in relieving pain caused by certain skin disorders."ch as coronary heart disease, stroke, and hypertension.

Researchers have been interested to find out if CBD's anti-inflammatory potential can support heart health--specific aspects of heart health, including the prevention of heart attack. There's more. Scientists are studying the effects of CBD on rats after they've experienced heart attacks to determine if it has an effect on heart damage.

CBD and Gastrointestinal Health

The Journal of Current Neuropharmacology reported that CBD shows promise in the treatment of inflammatory bowel diseases. Again, CBD's anti-inflammatory properties appear to have the potential to reduce the inflammation associated with gastrointestinal complaints like colitis and Crohn's disease. In studies involving mice, CBD reduced the inflammatory reaction and suppressed symptoms such as diarrhea. Can CBD help people experiencing common periodic bouts of gastrointestinal upset? Anecdotally speaking, it's possible as numerous users have experienced a benefit such as reduced pain and cramping and reduced episodes of constipation. More studies must be conducted to determine the exact efficacy of CBD in these cases.

CBD and Cancer

Researchers are still in the early stages of examining CBD's potential use in the treatment of certain cancers. The hope is that the anti-tumor effects that CBD has shown in animal studies and test tubes can have an application for humans at some point. These preliminary studies are examining CBD and its potential to treat lung cancer, breast cancer, and brain cancer--and to prevent these cancers from spreading to other areas of the body.



CBD and Pain

As mentioned earlier in our discussion, every ancient civilization with a hemp medical tradition used it to treat pain. Pain, of course, is associated with many health complaints, including cancer, rheumatoid arthritis, and injuries. Inflammation causes pain, and it's believed that the natural anti-inflammatory properties associated with CBD can naturally reduce the pain that people experience. Scientists are conducting numerous studies to determine how effective CBD may be to treat a wide range of health conditions.



It's essential for users of CBD products to remember that the FDA has only formally approved one CBD drug for the treatment of certain epileptic conditions. It has not advised people to take CBD for any other health conditions. People contemplating using CBD for medical conditions should, of course, consult with their medical practitioner for advice. CBD is essentially safe, but some people may experience side effects. Also, people who are taking medications for any health condition should check with their healthcare provider or pharmacist to ensure that the CBD will not interfere with their medication.

Remember, too, that these are only a few of the potential health benefits related to CBD. Studies are being conducted in the U.S. but also in other nations that have a revered medical tradition for high-quality research. Anyone interested in CBD and hemp research will need to check routinely for updates in CBD research. Each month, new reports related to CBD are published, many of which relate to ongoing and newly proposed research.

Your Legal Rights

The FDA is aware that there is a “significant interest in the development of therapies and other consumer products derived from cannabis and its components, including cannabidiol (CBD). FDA recognizes the potential opportunities that cannabis or cannabis-derived compounds may offer and acknowledges the significant interest in these possibilities.” While the FDA does not allow companies to “over promise” CBD cures or therapeutics unless they have formal scientific / medical evidence to support their claims, it has voiced its support for numerous studies and clinical trials involving CBD which is, indeed, promising as a therapeutic for many different conditions as we’ve discussed.

But Is CBD Legal?

The fact is, it is legal to purchase, consume, and sell CBD in most states. According to PBS, “purchasing CBD is federally legal as long as it doesn’t contain more than 0.3 percent THC.” However, some states have legislation that restrict buyers from purchasing or possessing CBD that’s derived from marijuana plants rather than hemp plants. Consequently, the main restrictions to CBD are effectively concerned with proper manufacturing processes and do not affect consumers.



Hemp Legality: The Situation Is Dynamic

Many citizens are aware that cannabis has been legalized in many states. Not only is hemp legal in many states, but marijuana is too. Some states have taken half measures; for instance, a few have only legalized medical marijuana. But, the legal situation regarding cannabis is fluid. What's illegal now in some states may be quite legal a year from now as many new pieces of legislation on this subject are already in the works.

Remember, hemp has been legalized at the federal level (thanks to the 'Farm Bill' Act of 2018). So, any issues regarding the marijuana plant or legal marijuana are quite separate from hemp.

Under federal law, hemp is perfectly legal.

What about Hemp Legalization at the State Level?

When it comes to hemp, each state features its own legislation and policies related to cultivation, distribution, product manufacturing and production, sales, and personal possession. Even if you are aware of current legislation in a particular state, it's important to note that many states are actively working to change or amend current laws. Some states are only just now developing policies related to hemp and CBD. While most states do allow the use of CBD for certain health conditions, the laws vary greatly, so it's helpful to check with your own state's legislature to find out the current legal situation, particularly if you want to carry hemp products in your store.



There are a couple states, though that number is dwindling, that put full restrictions on the purchase of CBD even though it is federally legal. And other states allow CBD products only to be sold if they are proven to have 0.0% THC or, in some cases, to have no more than 0.3%. However, most states fully embrace the federal mandate and take no issue with CBD products derived from hemp.

While there is still some flux when it comes to CBD and issues of legality, legalization at the federal level ensures that this burgeoning industry is likely to grow even more, especially as increasing studies show even greater potential for CBD as a possible therapeutic. Even states that have hitherto been squeamish about marijuana are debating over legislation that would legalize it.

Because CBD from hemp does not get anyone high as it contains little to no THC, it's now showing up in products that are sold just about everywhere. If you are concerned about your CBD extracts or products and aren't sure if they were manufactured properly and are without traces of THC, be sure to purchase your products only from respected vendors. Sellers who responsibly source their CBD will be transparent about its origin from hemp plants and provide information about their products' ingredients.

The best vendors will have their products tested and evaluated by third party medical review boards, providing customers with added peace of mind regarding the quality of their CBD.



The Future of Hemp: Cannabinoid Research Of Tomorrow



Hemp has emerged as a rapidly growing industrial and agricultural market sector. Consumers, growers, and manufacturers are all clamoring for more hemp research to back up the anecdotal evidence with modern medical study, clinical trials, and, ideally, new drugs designed to treat many different health conditions. Already, many different entities from private companies to public universities are considering different types of research projects associated with hemp.

For instance, the University of Nevada at Reno has plans to examine hemp's potential as the next leading crop for the state of Nevada. There are different hemp varieties with different water requirements.

The university plans to determine which varieties are ideal for the state's dry climate. Moreover, the alternative energy industry is examining the role hemp could play in developing 'green batteries' to replace lithium and graphene batteries. Studies like these are already attracting numerous investors as the potential for green products using hemp have enormous investment potential.

Hemp and Future Medical Research

Growing considerations and industrial uses aside, hemp is likely to be the focus of numerous medical research studies in the years to come. As mentioned earlier, there is tremendous interest in CBD for the potential treatment of conditions related to dementia such as Alzheimer's disease. Age-related cognitive decline continues to be a major problem in the U.S. One proposed study will examine if and the extent that CBD can reduce neuroinflammation related to stroke events and if it can induce neuroplasticity and neurogenesis.

Other researchers have plans to evaluate the role that CBD can play in the treatment of substance addiction--specifically for addictions to heroin and prescription painkillers. Preliminary studies related to a small group of women have already shown promise for CBD in this area. Study participants experienced fewer and less intensive cravings for opioids when taking CBD.

But these studies are only a fraction of those likely to get underway in the near future. Researchers from both public and private spheres are doing the preliminary groundwork (forming proposals, sourcing materials, soliciting support through grants / investors) needed to launch their CBD studies. Look for upcoming research that's related to CBD's potential for treatment for health conditions such as: cancer, schizophrenia, gastrointestinal disorders, asthma, post traumatic stress disorder, HIV/AIDS, pain management, multiple sclerosis, Huntington's disease, sleep disorders, ADHD, Tourette's syndrome, amyotrophic lateral sclerosis (ALS), obsessive compulsive disorder, depression, Parkinson's disease, and more.

And the research for health doesn't stop with humans. There are also many studies underway to determine the efficacy of CBD for the treatment of health conditions present in animals like dogs and cats.

CBD and the International Influen

Owing to some of the legality questions around CBD purchased in the U.S. for study, some universities like the University of California in San Diego are actually studying CBD drugs approved for use in other countries. The university plans to continue its research on a CBD drug developed by a Canadian pharmaceutical company to treat essential tremors. Some international drug companies are also supplying universities like Columbia University with drugs designed to treat serious conditions like nerve damage associated with breast cancer treatments.

Working directly with companies allows universities to easily derive materials for their studies while the companies look forward to collaborating with U.S. research institutions that may, indeed, publish objective reports about the efficacy of the drugs in question.

Many of the large research hospitals in the U.S. are involved or keeping close tabs on studies associated with CBD. For example, a simple search for 'CBD' on the Mayo Clinic's website will reveal numerous studies that the hospital is involved with or evaluating in some way. Few doubt the therapeutic potential of CBD. What remains is the need to conduct these studies so that new therapeutics and be developed and tested in clinical trials.

Conclusion

Hemp, aka cannabis sativa, is among the most useful plants as evidenced by the history of earliest civilizations. Used to make clothing, rope, sails, and shoes, hemp could be eaten for nourishment and used to treat a wide range of health conditions. The CBD oil harvested from hemp continues to provide relief from pain, epileptic fits, skin inflammation, and even depression. Were it not for its innocent relationship to the marijuana plant, this plant would likely have remained popularly cultivated in the U.S. without interruption.

Of course, today, views about drug use are changing. Hemp production is now widely encouraged in many areas. The use of CBD is exploding as people look for safe, natural alternatives to more dangerous pharmaceuticals like prescription painkillers. Because CBD is not habit forming or addictive, it has become a popular option for people looking for reliable pain relief without the dark side that is associated with so many pharma drugs on the market today.

Cannabinoids are enjoying a resurgence in popularity and a return to favor even among many modern medical practitioners. It will take years of research to provide the formal evidence needed for chemicals like CBD to win FDA approval, for example, to treat many complaints, but scientists are hard at work. Anecdotally, there is centuries' worth of evidence attesting to the efficacy of cannabinoids. Just as CBD has been formally approved to treat medical conditions like epilepsy, it may well win similar approval in the treatment of many other health conditions.

Thankfully, CBD is widely available and people can decide for themselves if its use affords them the relief they're searching for. CBD is included in hundreds of products today. Its use is safe and the production of hemp is up and likely to increase, particularly as more states legalize its cultivation.....

The demand for CBD has led to a demand for more hemp production. People are rediscovering hemp. People suffering from chronic health conditions are finding comfort in CBD's health benefits, and researchers are striving to learn all they can about this plant's medicinal properties so they can recommend its use to treat many great ills, possibly even cancer and Alzheimer's disease.

As more studies are published denoting the efficacy of CBD for treating health conditions, new products containing this chemical are likely to surface and the demand for CBD is only likely to increase further. For now and then, it's important for users to choose premium-quality CBD that's been lab tested and medical panel reviewed. The best product ingredients are poised to have the best effects on the body to promote its health and well-being.

Consumers of CBD should also continue to monitor questions of legality associated with CBD, particularly in the few states that continue to strictly regulate this chemical. As scientists and legislators learn more about CBD and its potential to support human health, it's certainly likely that current laws will change to reflect the research.

Until then, consumers have numerous options for purchasing CBD. Experts advise people to avoid hemp and CBD products sold in gas stations as these may contain THC. Instead, only purchase your CBD products from the most reputable sources such as Modern Remedy. Modern Remedy features CBD that is responsibly sourced from hemp. The company insists on using only premium-quality CBD to be incorporated into its products.

All of Modern Remedy's products are reviewed by a panel of clinicians to evaluate them for safety and efficacy. All of the company's products are made with high-quality natural ingredients, are tested for lab compliance, and are medical panel reviewed. Look for products on the company's website like its Pain Salve, Dream Elixir, and Pet Elixir.

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