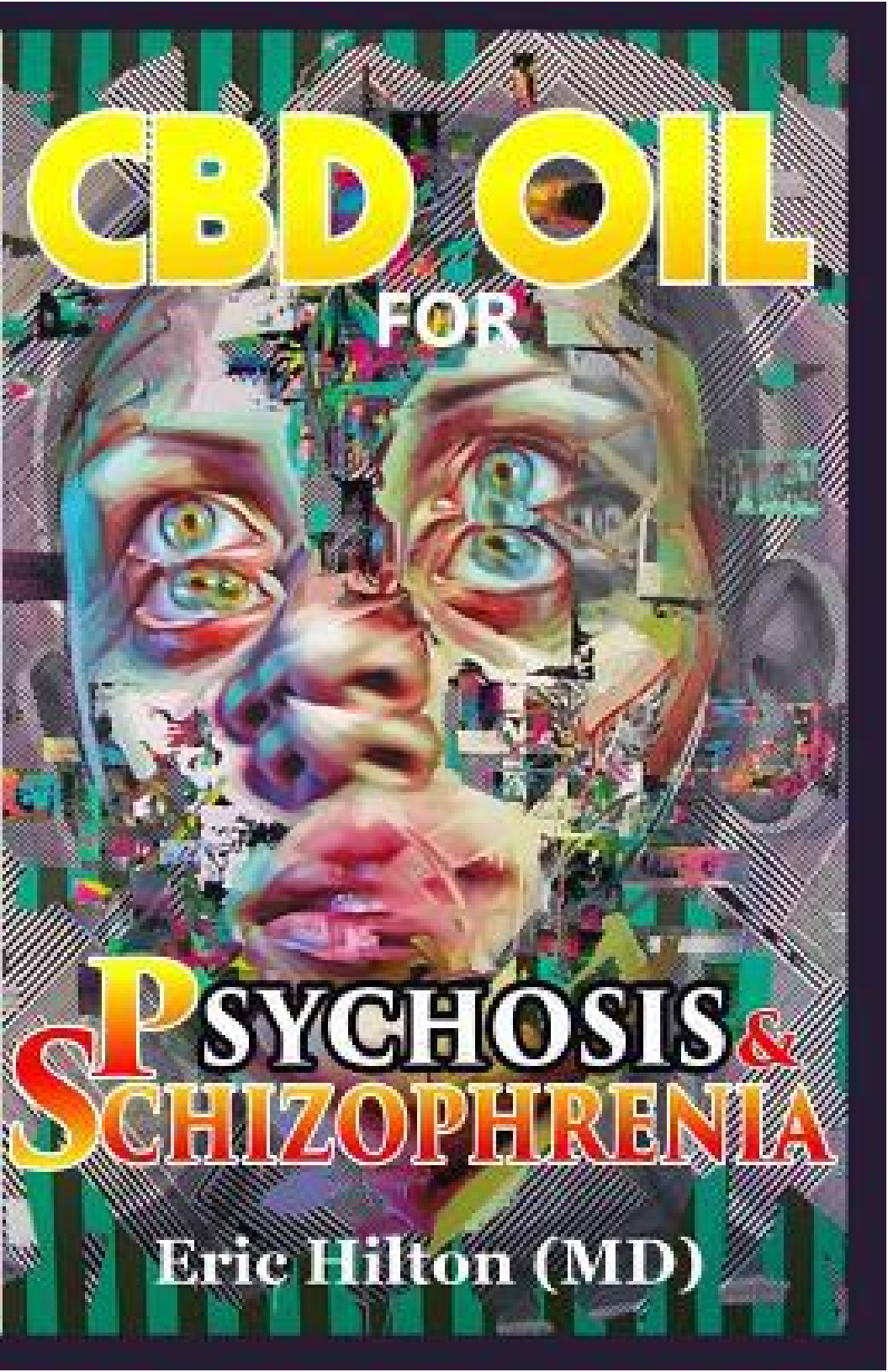
CBD OIL
FOR
PSYCHOSIS &
SCHIZOPHRENIA
Eric Hilton (MD)

This Book contains information that is intended to help the readers be better informed consumers of health care. It is presented as general advice on health care.

Always endeavour to consult your doctor befor beginning any new exercise program it is recommended that you seek medical advice from your personal physician.

This book is not intended to be a substitute for the medical advice of a licensed physician. The reader should consult with their doctor in any matters relating to his/her health.

Table of Contents

INTRODUCTION

It might sound kind of crude to say it, but psychosis might kind of be considered as the "peak" of mental disorders; on a level of severity, it far exceeds the likes of generalized depression, bipolar disorder, and anxiety. In short, psychosis (which includes schizophrenia) represents a complete detachment from the world of reality. It's when individuals begin displaying highly erratic behavior, and can no longer distinguish between what's real and what's not.

That being said, it seems unlikely that a natural therapy like cannabis or any sort of medication, for that matter has proven to be effective in reversing the onset of the condition. However, studies that analyze the effects of marijuana for schizophrenia and psychosis have been going on for years, and now, scientists are starting to turn their attention specifically to CBD as a possible treatment.

In this book, we'll go over a couple of these recent and relevant studies which show positive signs of CBD for psychosis being a treatment option. It's interesting to

stay up to date and informed on how the herb manipulate and even reverse the neurological trends of the disorder.

For years, those suffering from Schizophrenia have been forced to endure harsh pharmaceuticals to merely cope with everyday life. More than 200,000 people in the U.S. live with Schizophrenia which affects their ability to think, behave, or even feel rationally. The search for a more tolerable alternative has always been a priority for many but not until recently, has a viable option received so much support.

Schizophrenia is a chronic, severe, debilitating mental illness characterized by disordered thoughts, abnormal behaviors, and anti-social behaviors. It is a psychotic disorder, meaning the person with schizophrenia does not identify with reality at times.

A study published aimed to prove the effectiveness of CBD compared to that of the powerful antipsychotic Amisulpride in the treatment of Schizophrenia. Studies were conducted with the cooperation of 42

Schizophrenia patients. Though both treatments proved effective, CBD was the clear winner with minimal to no side effects in comparison to the potent pharmaceutical option.

What actually happens during Psychosis?

We mentioned that psychosis and schizophrenia are mental disorders that represent a total detachment from reality, but what is it that actually causes this to happen? What takes place in the brain that drives an individual to become separated from the real world?

In short, scientists are not sure what exactly causes the onset of psychosis or schizophrenia. Regardless of what you may have heard in the past, they are unsure of why some people develop psychotic symptoms over the course of their life, and others do not. Unlike medical conditions like diabetes or heart disease, no one has been unable to pinpoint an exact physiological condition which accounts for the disorder.

However, it's generally agreed upon that some combination of physical, genetic, and environmental influences account for the onset of the disorder.

In terms of genetics, for example, it has been proven that schizophrenia tends to run in families, so if you have a family member that has gone through psychotic episodes in the past, you may be more likely to develop the disorder at some point in your life. However, no one single gene has yet been traced to the disease onset.

Likewise, studies have shown that individuals with psychosis undergo changes in the physical structure of the brain. While subtle, it's believed that these changes may result in some chemical depletion or malfunction which leads to a separation from reality.

Neurotransmitters are another likely "culprit" of onset psychosis and schizophrenia. These are chemicals in the brain that relay messages between cells, and it's believed that irregularities in their activity (specifically dopamine and serotonin) are highly influential in developing symptoms.

In terms of environmental triggers, things like stress and drug abuse have also shown to be influential in the onset of the disorder, especially when combined with any of the aforementioned chemical/physical irregularities.

And lastly, with regard to prevalence, it's likely that psychosis is more common than you might think. Recent estimations by the Schizophrenia and Related Disorders Alliance of America (SARDAA), in fact, claim that nearly 3.5 million Americans and roughly 75 million individuals worldwide suffer from the disorder.

What is Psychosis?

Psychosis is characterized by an impaired relationship with reality. It's a symptom of serious mental disorders. People who are experiencing psychosis may have either hallucinations or delusions.

Hallucinations are sensory experiences that occur within the absence of an actual stimulus. For example, a person having an auditory hallucination may hear their mother yelling at them when their mother isn't

around. Or someone having a visual hallucination may see something, like a person in front of them, who isn't actually there.

The person experiencing psychosis may also have thoughts that are contrary to actual evidence. These thoughts are known as delusions. Some people with psychosis may also experience loss of motivation and social withdrawal.

These experiences can be frightening. They may also cause people who are experiencing psychosis to hurt themselves or others. It's important to see a doctor right away if you or someone you know is experiencing symptoms of psychosis.

Fast facts on psychosis

Here are some key points about psychosis.

- Psychosis is not a disease in its own right; it is a symptom
- A common psychotic delusion is a belief that the individual is an important figure

- Earlier diagnosis of psychosis improves long-term outcomes
- Symptoms of psychosis

The classic signs and symptoms of psychosis are:

- **Hallucinations** - hearing, seeing, or feeling things that do not exist
- **Delusions -** false beliefs, especially based on fear or suspicion of things that are not real
- **Disorganization** - in thought, speech, or behavior
- **Disordered thinking** - jumping between unrelated topics, making strange connections between thoughts
- **Catatonia** - unresponsiveness
- **Difficulty concentrating**

Depending on the cause, psychosis can come on quickly or slowly. The same is the case in schizophrenia, although symptoms may have a slow onset and begin with milder psychosis; some people

may experience a rapid transition back to psychosis if they stop taking their medication.

The milder, initial symptoms of psychosis might include:

- Feelings of suspicion
- General anxiety
- Distorted perceptions
- Depression
- Obsessive thinking
- Sleep problems

Hallucinations can affect any of the senses (sight, sound, smell, taste, and touch) in the person with psychosis, but in about two-thirds of patients with schizophrenia, hallucinations are auditory - hearing things and believing them to be real when they do not exist.

The following auditory hallucinations are common:

- Hearing several voices talking, often negatively, about the patient

- A voice giving a commentary on what the patient is doing
- A voice repeating what the patient is thinking

Bizarre delusions during psychosis

Paranoia is a common component of psychotic delusions. Examples of psychotic delusions include the paranoid type more likely to be associated with schizophrenia - and delusions of grandeur.

- **Paranoid delusions** - these may cause the person with psychosis to be unduly suspicious of individuals or organizations, believing them to be plotting to cause them harm.
- **Delusions of grandeur** - clearly false but strongly held belief in having a special power or authority - for instance, they may believe that they are a world leader.

Diagnosis of Psychosis

In this section, we will discuss the available tests and methods for diagnosing psychosis.

Early diagnosis

Early diagnosis of psychosis improves long-term outcomes. This is not always achieved, however. The milder forms of psychosis that can lead to schizophrenia are left untreated for an average of 2 years, and even full psychosis can take a number of years before it receives the attention of medical professionals.

To increase the chances of early detection, guidance for healthcare systems drawn up by psychiatrists recommend that the "possibility of a psychotic disorder should be carefully considered" in a young person who is:

- Becoming more socially withdrawn
- Performing worse for a sustained period at school or work, or
- Becoming more distressed or agitated yet unable to explain why

There is no biological test for psychosis itself, and if laboratory tests are done, it is to rule out other medical problems that might provide an alternative explanation.

Questions for patient and family

Psychosis is primarily diagnosed by clinical examination and history - the doctor examines the patient and asks about their symptoms, experiences, thoughts, and daily activities; they will also ask if there is a family history of psychiatric illness.

Other medical conditions are ruled out first of all, especially delirium (sudden onset of a confused state), but epilepsy and a number of other medical explanations are possible.

Doctors will also check for any history of intoxication with drugs, both legal and illegal, and toxins, usually asking for a urine sample to check this.

Once psychosis is narrowed down to a psychiatric cause, there are clearly defined criteria that must be met before a diagnosis is confirmed. Psychiatrists generally rely on the American Psychiatric Association (APA)'s publication known as the DSM (Diagnostic and Statistical Manual of Mental Disorders) to make psychiatric diagnoses.

Brain Scans

Brain scans may be done in the early stages of medical attention so that other conditions often treatable and reversible can be ruled out.

EEG (electroencephalography) testing records the brain's electrical activity and may help to rule out delirium, head injury, or epilepsy as possible causes of psychotic symptoms.

Causes of Psychosis

The exact causes of psychosis are not well understood but might involve:

- **Genetics** - research shows that schizophrenia and bipolar disorder may share a common genetic cause.
- **Brain changes** - alterations in brain structure and changes in certain chemicals are found in people who have psychosis. Brain scans have revealed reduced gray matter in the brains of some individuals who have a history of

psychosis, which may explain effects on thought processing.

- **Hormones/sleep** - postpartum psychosis occurs very soon after giving birth (normally within 2 weeks). The exact causes are not known, but some researchers believe it might be due to changes in hormone levels and disrupted sleep patterns.

Traditional treatments for Psychosis

Antipsychotic drugs

Treatment with a class of drugs known as antipsychotics is the most common therapy for people with a psychotic illness.

Antipsychotics are effective at reducing psychosis symptoms in psychiatric disorders such as schizophrenia, but they do not themselves treat or cure underlying psychotic illnesses.

So called second generation antipsychotics are most commonly used by doctors to treat psychosis. While their use is widespread in the United States, this is

controversial. The World Health Organization (WHO) does not recommend them, except clozapine (branded Clozaril and FazaClo in the U.S.), which may be used under special supervision if there has been no response to other antipsychotic medicines.

Acute and maintenance phases of schizophrenia

Antipsychotic treatment of schizophrenia is in two phases - the acute phase to treat initial psychotic episodes and a lifelong phase of maintenance therapy.

During the acute phase, a stay in hospital is often needed. Sometimes a technique called rapid tranquilization is used. A fast-acting medication that relaxes the patient will be used to ensure that they do not harm themselves or others.

In the maintenance phase, treatment of schizophrenia is in the community and antipsychotics help to prevent further psychotic episodes, although relapses often occur, sometimes due to a failure to take the medications. Lifelong treatment of schizophrenia may

involve other interventions and support, including the role of the family in care.

Psychotherapy can also be useful in treating cognitive and residual symptoms of schizophrenia and other psychotic disorders.

Types of Psychosis

A number of disorders can display psychotic symptoms, including:

- **Schizophrenia** - a serious mental health disorder affecting the way someone feels, thinks, and acts. Individuals find it difficult to distinguish between what is real and what is imaginary.
- **Schizoaffective disorder** - a condition similar to schizophrenia that includes periods of mood disturbances.
- **Brief psychotic disorder** - psychotic symptoms last at least 1 day but no longer than 1 month. Often occurring in response to a stressful life event. Once symptoms have gone, they may never return.

- **Delusional disorder** - the individual has a strong belief in something irrational and often bizarre with no factual basis. Symptoms last for 1 month or longer.
- **Bipolar psychosis** - individuals have the symptoms of bipolar disorder (intense highs and lows in mood) and also experience episodes of psychosis. The psychosis more commonly occurs during manic phases.
- **Psychotic depression** - also known as major depressive disorder with psychotic features.
- Postpartum (also called postnatal) psychosis - a severe form of postnatal depression.
- **Substance-induced psychosis** - including alcohol, certain illegal drugs, and some prescription drugs, including steroids and stimulants.

These are the primary causes of psychotic symptoms, but psychosis can also be secondary to other disorders and diseases includes:

- Brain tumor or cyst
- Dementia - Alzheimer's disease, for example

- Neurological illness - such as Parkinson's disease and Huntington's disease
- HIV and other infections that can affect the brain
- Some types of epilepsy
- Stroke

What is Schizophrenia?

Schizophrenia is a serious disorder which affects how a person thinks, feels and acts. Someone with schizophrenia may have difficulty distinguishing between what is real and what is imaginary; may be unresponsive or withdrawn; and may have difficulty expressing normal emotions in social situations.

Contrary to public perception, schizophrenia is not split personality or multiple personality. The vast majority of people with schizophrenia are not violent and do not pose a danger to others. Schizophrenia is not caused by childhood experiences, poor parenting or lack of willpower, nor is the symptoms identical for each person.

Who Is Affected?

Of the nearly 4 million victims who suffer from the disease, it's estimated that nearly 50% of them will receive no treatment. This is due in large part to the extremely high expense of medications, as well as a lack of healthcare availability to a majority of sufferers. Likewise, though, this is also why cannabis (and specifically CBD) is becoming a popular treatment option, it's available to everyone from a relatively manageable price.

• Schizophrenia affects about 1.1% of the world's population

• 3.5 million Americans have schizophrenia

• Schizophrenia is most commonly diagnosed between the ages of 16 to 25

• Schizophrenia can be hereditary (runs in families)

• It affects men 1.5 times more commonly than women

• Schizophrenia and its treatment has an enormous effect on the economy, costing between $32.5-$65 billion each year

How Common is Schizophrenia in Children?

Schizophrenia in young children is rare. The National Institute of Mental Health (NIMH) estimates only 1 in 40,000 children experience the onset of schizophrenia symptoms before the age of 13.

Types of Schizophrenia

There are five types of schizophrenia (discussed in the following slides). They are categorized by the types of symptoms the person exhibits when they are assessed:

- Paranoid schizophrenia
- Disorganized schizophrenia
- Catatonic schizophrenia
- Undifferentiated schizophrenia
- Residual schizophrenia

Paranoid Schizophrenia

Paranoid-type schizophrenia is distinguished by paranoid behavior, including delusions and auditory hallucinations. Paranoid behavior is exhibited by feelings of persecution, of being watched, or sometimes this behavior is associated with a famous or noteworthy person a celebrity or politician, or an entity such as a corporation. People with paranoid-type schizophrenia may display anger, anxiety, and hostility. The person usually has relatively normal intellectual functioning and expression of affect.

Disorganized Schizophrenia

A person with disorganized-type schizophrenia will exhibit behaviors that are disorganized or speech that may be bizarre or difficult to understand. They may display inappropriate emotions or reactions that do not relate to the situation at-hand. Daily activities such as hygiene, eating, and working may be disrupted or neglected by their disorganized thought patterns.

Catatonic Schizophrenia

Disturbances of movement mark catatonic-type schizophrenia. People with this type of schizophrenia may vary between extremes: they may remain immobile or may move all over the place. They may say nothing for hours, or they may repeat everything you say or do. These behaviors put these people with catatonic-type schizophrenia at high risk because they are often unable to take care of themselves or complete daily activities.

Undifferentiated Schizophrenia

Undifferentiated-type schizophrenia is a classification used when a person exhibits behaviors which fit into two or more of the other types of schizophrenia, including symptoms such as delusions, hallucinations, disorganized speech or behavior, catatonic behavior.

Residual Schizophrenia

When a person has a past history of at least one episode of schizophrenia, but the currently has no symptoms (delusions, hallucinations, disorganized

speech or behavior) they are considered to have residual-type schizophrenia. The person may be in complete remission, or may at some point resume symptoms.

What are Causes of Schizophrenia?

Schizophrenia has multiple, intermingled causes which may differ from person to person, including:

- Genetics (runs in families)
- Environment
- Brain chemistry
- History of abuse or neglect

Is Schizophrenia Hereditary?

Schizophrenia has a genetic component. While schizophrenia occurs in only 1% of the general population, it occurs in 10% of people with a first-degree relative (parent, sibling) with the disorder. The risk is highest if an identical twin has schizophrenia. It is also more common in people with a second-degree relative (aunts, uncles, cousins, grandparents) with the disorder.

Schizophrenia Symptoms

Many people with schizophrenia do not appear ill. However, many behavioral changes will cause the person to seem 'off' as the disease progresses. Symptoms include:

- Social withdrawal
- Anxiety
- Delusions
- Hallucinations
- Paranoid feelings or feelings of persecution
- Loss of appetite or neglecting to eat
- Loss of hygiene

Symptoms may also be grouped into categories, discussed in the following slides.

Positive (More Overtly Psychotic) Symptoms

The "positive," or overtly psychotic, symptoms are symptoms not seen in healthy people, include:

- Delusions
- Hallucinations
- Disorganized speech or behavior

- Dysfunctional thinking
- Catatonia or other movement disorders

Negative (Deficit) Symptoms

"Negative" symptoms disrupt normal emotions and behaviors and include:

- Social withdrawal
- "Flat affect," dull or monotonous speech, and lack of facial expression
- Difficulty expressing emotions
- Lack of self-care
- Inability to feel pleasure (anhedonia)

Cognitive Symptoms

Cognitive symptoms may be most difficult to detect and these include:

- Inability to process information and make decisions
- Difficulty focusing or paying attention
- Problems with memory or learning new tasks

Affective (or Mood) Symptoms

Affective symptoms refer to those which affect mood. Patients with schizophrenia often have overlapping depression and may have suicidal thoughts or behaviors.

How is Schizophrenia Diagnosed?

The diagnosis of schizophrenia is made both by ruling out other medical disorders that can cause the behavioral symptoms (exclusion), and by observation of the presence of characteristic symptoms of the disorder. The doctor will look for the presence of delusions, hallucinations, disorganized speech or behavior, and/or negative symptoms, along with social withdrawal and/or dysfunction at work or in daily activities for at least six months.

The doctor may use physical examination, psychological evaluation, laboratory testing of blood, and imaging scans to produce a complete picture of the patient's condition.

Mental health screening and evaluation is an important part of the diagnosis process for schizophrenia. Many other mental illnesses such as bipolar disorder, schizoaffective disorder, anxiety disorders, severe depression, and substance abuse may mimic symptoms of schizophrenia. A doctor will perform an assessment to rule out these other conditions.

Schizophrenia Treatment - Medications

Antipsychotic medications are the first-line treatment for many patients with schizophrenia. Medications are often used in combination with other types of drugs to decrease or control the symptoms associated with schizophrenia. Some antipsychotic medications include:

- olanzapine (Zyprexa)
- risperidone (Risperdal)
- quetiapine (Seroquel)
- ziprasidone (Geodon)
- aripiprazole (Abilify)
- paliperidone (Invega)

Mood swings and depression are common in patients with schizophrenia. In addition to antipsychotics, other types of medications are used.

Mood stabilizers include:

- lithium (Lithobid)
- divalproex (Depakote)
- carbamazepine (Tegretol)
- lamotrigine (Lamictal)

Antidepressants include:

- fluoxetine (Prozac)
- sertraline (Zoloft)
- paroxetine (Paxil)
- citalopram (Celexa)
- escitalopram (Lexapro)
- venlafaxine (Effexor)
- desvenlafaxine (Pristiq)
- duloxetine (Cymbalta)
- bupropion (Wellbutrin)

Schizophrenia Treatment - Psychosocial Interventions

Family psycho-education: It is important to include psychosocial interventions in the treatment of schizophrenia. Including family members to support patients decreases the relapse rate of psychotic episodes and improves the person's outcomes. Family relationships are improved when everyone knows how to support their loved one dealing with schizophrenia.

Assertive community treatment (ACT): Another form of psychosocial intervention includes use of out-patient support groups. Support teams including psychiatrists, nurses, case managers, and other counselors, meet regularly with the schizophrenic patient to help reduce the need for hospitalization or a decline in their mental status.

Substance abuse treatment: Many people with schizophrenia (up to 50%) also have substance abuse issues. These substance abuse issues worsen the behavioral symptoms of schizophrenia and need to be addressed for better outcomes.

Social skills training: Patients with schizophrenia may need to re-learn how to appropriately interact in social situations. This kind of psychosocial intervention involves rehearsing or role-playing real-life situations so the person is prepared when they occur. This type of training can reduce drug use, and improve relationships.

Supported employment: Many people with schizophrenia have difficulty entering or re-entering the work force due to their condition. This type of psychosocial intervention helps people with schizophrenia to construct resumes, interview for jobs, and even connects them with employers willing to hire people with mental illness.

Cognitive behavioral therapy (CBT): This type of intervention can help patients with schizophrenia change disruptive or destructive thought patterns, and enable them to function more optimally. It can help patients "test" the reality of their thoughts to identify hallucinations or "voices" and ignore them. This type of therapy may not work in actively psychotic patients,

but it can help others who may have residual symptoms that medication does not alleviate.

Weight management: Many anti-psychotic and psychiatric drugs cause weight gain as a side effect. Maintaining a healthy weight, eating a well-balanced diet, and exercising regularly helps prevent or alleviate other medical issues.

CBD OIL

The market is flooded with various CBD based products. Ranging from CBD oil as a sale for the retailer to CBD terps for wholesaler, the market is swarming with CBD incorporated products and CBD oil sellers are gaining benefits by leaps and bounds. The multitude of benefits of CBD has motivated scientists to conduct studies on its usage in various other fields. Extensive research is being done to come up with its effectiveness for curing innumerable diseases.

Cannabidiol is a famous natural remedy used for many prevalent ailments. Better known as CBD, it is

one of the 104 chemical compounds known as cannabinoids found in the cannabis or marijuana plant, Cannabis.

Tetrahydrocannabinol (THC) is the essential psychoactive cannabinoid found in cannabis and causes the sensation of getting "high" that is often associated with marijuana. However, unlike THC, CBD is not psychoactive. This quality makes CBD a tempting option for those who are looking for comfort from pain and other symptoms without the mind-altering effects of marijuana or certain pharmaceutical drugs.

CBD oil is made by obtaining CBD from the cannabis plant, then mix it with a carrier oil like coconut or hemp seed oil. It is gaining acceptance in the health and wellness world, with some scientific studies proving it may help treat a variety of ailments like severe pain and anxiety.

Cannabidiol (more commonly known as CBD) has experienced an increase in popularity in recent months, in part due to its availability in high-street

health shops. Previously sees as an option only for the seriously ill, CBD oil is gaining momentum among wellness fans, with its promise of being able to provide comfort from everything from pain to depression and anxiety. But what exactly is it and are there any associated side effects?

CBD, Cannabis Relativity

CBD is one of 104 chemical compounds, known as cannabinoids, that can be found in the cannabis plant. It is a naturally crop up substance, which can be extracted and diluted with a carrier oil often hemp seed or coconut to generate CBD oil.

How CBD Works?

Cannabidiol, also known as CBD, is one of the most active ingredients found in Hemp. But, it is not like THC (psychoactive) and does not make you high. Our body consists of an endocannabinoid system that has receptors spread throughout, even your brain. CBD does not activate these receptors like THC meaning that does not cause psychotic effects on the brain.

What are CB1 and CB2 Receptors?

Cannabinoid receptors are responsible for many different processes in the body such as our appetite, memory, regulation of mood, and even the physical sensations that we feel. These receptors are most often activated by natural endocannabinoids that are produced in the body and also by the cannabinoids that are found in cannabis and hemp.

The two main types of Cannabinoid receptors are CB1 and CB2. CB1 is mostly found in our central nervous system, but little traces can also be found in the lungs, liver and the kidneys. CB2, on the other hand, is an essential part of our immune system. CB1 produces and releases neurotransmitters when they are activated by cannabis leading to psychotic effects. CB1 receptors also help maintain the homeostasis of the body and also support in the lipogenesis process in the liver. CB2 is involved in many different functions of the body such as the apoptosis and also in immune suppression. It also modulates the pain that we suffer and plays an essential part in many neurodegenerative diseases.

CBD vs THC

Many people are hesitant to use CBD because they know that it comes from the same plant as THC. THC, or tetrahydrocannabinol, is another cannabinoid. This one is largely responsible for many of the psychoactive effects that a person can experience when smoking marijuana.

Marijuana is quite a powerful drug and it's understandable that some people would want to ensure that they're not going to get high when using CBD. Rest assured, CBD and THC have vastly different effects, and CBD is not psychoactive at all.

This is interesting because structurally, CBD and THC are almost identical. Their molecules have the same number and same type of atoms; they are simply arranged differently. This contributes to the vast differences in experiences when using these two compounds.

Is CBD safe?

All newbies to CBD ask if it is safe. CBD is considered safe but there hasn't been enough research to take in consideration what the long term affects could entail. It has been legalized in the USA and many parts of the world but there haven't been clinical trials so it's not completely legal worldwide. Keep in mind, CBD nerds is not a medical site and would encourage you to consult with a physician regarding the use of CBD for medical purposes. CBD is nontoxic, doesn't negatively affect gastrointestinal transit, and doesn’t affect physiological parameters like blood pressure, heart rate, or body temperature. High doses up to 1,500mg for humans can be tolerable. We do highly recommend if you purchase CBD to make sure the company you buy from has transparent lab test results on their website as well as dosage instructions. We'll give you general dosage instructions further down this guide.

Is CBD Legal?

Yes, CBD is legal almost worldwide (a controlled substance in Canada alone). As we've seen above, there is a lot of misinformation surrounding CBD, partially because its chemical properties are poorly understood and partially because of its close resemblance to THC. Marijuana is classified as a Class A drug (primarily for political reasons rather than dangerous ones). Regardless, even the lawmakers recognize that CBD poses no health threats and have legalized it. You can purchase CBD legally in all 50 states and have it shipped to your door.

CBD Effects

The interesting thing about CBD is that it will not have many effects if you are not treating an actual problem. That is to say, CBD works by helping to restore balance and function to the endocannabinoid system (ECS), as mentioned earlier. If your endocannabinoid system is in perfect health, then taking CBD won't do much for you.

Unfortunately, the reality is that most of us have at least some imbalance in our ECS. These imbalances can come from a number of things that we're exposed to on a daily basis: pollution, stress, unhealthy food, etc.

For these people, CBD is known for providing a number of positive benefits:

- Reduced inflammation, improving pain and swelling for people with problems like arthritis
- Increased relaxation and ability to fall asleep
- Reduced anxiety and depression
- Improved sociability
- Improved concentration
- Improved digestion

All of these benefits can work together to help ward off various illnesses and diseases.

CANNABINOIDS OVERVIEW

You likely know many of the effects of marijuana, but have you ever wondered how one plant can do so many things? From a pleasurable high to effective treatment for a variety of medical conditions, cannabis owes many of its best qualities to cannabinoids. The cannabis plant naturally creates a variety of these compounds, each with specific benefits and potential side effects.

Ongoing research continues to shed light on the potential medicinal benefits of the various compounds. Learning about the different types of cannabinoids and the effects they cause gives you a better understanding of the plant itself and how it could help you with medical conditions.

What Are Cannabinoids?

Simply put, cannabinoids are one of many compounds found in the marijuana plant. These naturally occurring compounds have perhaps the most significance when it comes to marijuana's effect the body. Cannabinoids claim responsibility for

alleviating many ailments, as well as giving you a high. Each cannabinoid is slightly different in both the type and the effects. The concentration of each cannabinoid varies, as well.

Of the 500 natural compounds in the cannabis plant, at least 85 of them fall into the cannabinoid category. Certain cannabinoids stand out for having particular beneficial effects on the body, while most cannabinoids are virtually unknown.

The compounds develop naturally in the cannabis plant, but growers and medical marijuana manufacturers can alter the plant or create synthesized cannabinoid products to produce higher levels of particular cannabinoids. The purpose of this practice is to increase the effects of a particular cannabinoid, making the marijuana strain or synthesized cannabinoid product more appealing to a particular audience.

How Cannabinoids Work

Your body naturally produces cannabinoids, known as endocannabinoids, which support a variety of body

functions, such as your sleep patterns, emotions, movements and appetite. The system within your body is known as the endocannabinoid system. The endocannabinoids play a vital role in keeping you healthy and providing internal stability, or homeostasis.

Essentially, the naturally occurring chemicals in your body facilitate cell communication. Problems with your endocannabinoids can manifest in the form of physical problems and other issues due to the imbalance in your body.

Cannabinoids interact with receptors throughout the body, including the immune system and the central nervous system. The body has two types of receptors: CB1 receptors in the brain and central nervous system and CB2 receptors in the immune system. The cannabinoids in marijuana mimic the natural compounds in your body, binding to receptors inside the body. This binding process is the reason you feel the physical effects of using marijuana, such as feeling relaxed, feeling buzzed or having a slower reaction time.

Different types of cannabinoids tend to bind with receptors in different locations in the body. This is part of the reason certain cannabinoids have particular effects. For example, THC, which is responsible for causing a high, binds well with receptors in the brain. This helps amplify that high feeling.

When you smoke or vape marijuana, the cannabinoids go directly into your lungs quickly and then immediately on to the heart, which gets the cannabinoids to the brain quickly. In the brain, the cannabinoids lock on to the receptors, which initiates the buzzed feeling? The timeframe from first smoking the marijuana to it reaching the brain and beginning the effects takes about 2.5 minutes.

When ingesting edible containing cannabis, the process takes longer for THC to take full effect. It can take from 30 minutes to 2 hours to feel the effects. However, once the marijuana kicks in, the effects are much more intense than other forms of using marijuana.

The different cannabinoids in cannabis affect the receptors differently, depending on the specific cannabinoid and the location in the body. The foundation of medicinal marijuana is targeting the type of cannabinoids to specific receptors in the body for maximum effect on a particular problem. Marijuana manufactured as medicine includes a larger amount of specific cannabinoids to treat particular symptoms. Understanding the effects of cannabinoids helps with the specific treatment course when you use marijuana for medicinal purposes.

Common Benefits of Cannabinoids

While the specific benefits vary from one cannabinoid to the next, many common benefits are found in many types of these compounds. These benefits are often the reason people seek marijuana for medical reasons. Some of the primary benefits of cannabinoids include:

• **Pain relief:** Many cannabinoids offer an analgesic effect, making marijuana popular for people who suffer from chronic pain. The cannabinoids can be an effective way to control pain, and the pain relief comes

with additional benefits, which may also improve a medical condition that causes pain. The pain relief from marijuana can be an option when other types of pain relief don't work.

• **Anti-inflammatory:** Inflammation is associated with many modern medical problems, including Crohn's disease. By reducing inflammation in the body, cannabinoids can provide medicinal effects on those conditions.

• **Antibacterial:** Many compounds in marijuana offer an antibacterial effect, with some working effectively on infections that are often resistant to antibiotics, such as staph infections. This offers individuals who are dealing with an infection another treatment course. Some cannabinoids also offer anti-fungal properties for additional uses.

• **Appetite stimulant:** Having the munchies is often a source of jokes when it comes to marijuana, but it serves as a powerful benefit in certain cases. For people who need to gain weight or increase appetite, marijuana can be a helpful tool.

• **Sedative:** Another group of people who benefit from the effects of some cannabinoids are those who have sleep issues. Some of the compounds in cannabis have a sedative effect that can help you fall asleep. Insomnia can have a major impact on life, so an effective sedative option is a huge benefit for people who have difficulty sleeping.

• **Nerve and brain cell protection:** Many cannabinoids show the potential for protecting nerves and brain cells. In some cases, cannabinoids may help grow new brain cells.

• **Antitumor effects:** Certain cannabinoids appear to slow or reduce tumor growth, a huge benefit for people facing a cancer diagnosis. This potential benefit gives cancer patients another potential tool in fighting the tumors. Another positive effect for cancer patients is help with vomiting and nausea often associated with chemotherapy.

• **Antispasmodic:** Marijuana is often used to treat disorders that cause convulsions or spasms, such as epilepsy. Certain cannabinoids seem to have an

antispasmodic effect, which helps reduce or eliminate seizures caused by epilepsy. This can drastically improve the lives of people affected by epilepsy, especially those who have frequent seizures. Using medical marijuana can help those people live a more normal life.

- **Antioxidant:** Cannabis seems to have an antioxidant effect on the body, thanks to certain cannabinoids. Antioxidants help fight free radicals that can cause damage within the body.

- **Reduce intraocular pressure:** Glaucoma patients turn to marijuana for the reduction in intraocular pressure caused by some cannabinoids. This can have medicinal benefits for glaucoma.

- **Antidepressant:** While THC can trigger anxiety or paranoia in some individuals, many other cannabinoids are known for their antidepressant qualities. Marijuana can help improve and balance your mood. For people with depression, cannabinoids may provide help for depression.

Types of Cannabinoids

Cannabinoids fall into two different categories: psychoactive and non-psychoactive. This classification influences the way a particular compound affects your body. Psychoactive cannabinoids give you the high feeling often associated with using marijuana. THC is the primary psychoactive cannabinoid in marijuana. Cannabinol, or CBN, is another psychoactive compound found in cannabis.

Non-psychoactive cannabinoids don't cause the high feeling. They do have other effects on the body, sometimes very significant effects, but they aren't responsible for giving you the buzzed feeling. Cannabidiol, or CBD, is one of the most prominent non-psychoactive cannabinoids in marijuana. People who use marijuana for medicinal purposes benefit from the non-psychoactive cannabinoids when they don't want the buzz.

While there are more than 85 different types of cannabinoids, only a handful get the spotlight when people talk about the effects of marijuana. Those

primary cannabinoids often receive the most attention in research regarding cannabis, which means we know more about how they work and their effects. That doesn't mean these are the only beneficial cannabinoids, however.

The benefits and side effects of cannabinoids vary significantly. When doing your research, keep in mind that individuals respond differently to various cannabinoids. With the use of medical marijuana, the concentrations of various cannabinoids also influence the effects in your body. The side effects of a particular cannabinoid might be more noticeable with higher concentrations, for example.

Another consideration is your perspective. Some effects of a particular cannabinoid are a positive for certain people. Other people don't want that effect, so they see it as a negative. For example, a cannabinoid that creates that high feeling is a positive for someone who wants to feel a high, such as a recreational marijuana user. Someone who wants to reap the medicinal benefits of marijuana without feeling high sees it as a negative.

Drowsiness and appetite stimulation are two other examples. Someone who has trouble sleeping appreciates the drowsy effect, while someone who wants to use marijuana but stay alert sees it as a negative. A person who needs to eat more for health reasons benefits from cannabinoids that stimulate the appetite, while someone who doesn't want to eat more won't benefit from that effect.

Understanding the different types of cannabinoids helps you maximize the positive effects while minimizing the unwanted ones.

The Most Known Cannabinoids

The most common cannabinoids in cannabis are THC, THCV, CBG, CBC, CBN, and CBD. Since the 1980's, the discovery of cannabinoid receptor cells has produced multitudes of research of the effects and workings of canabinoids. It was first hypothesized that cannabinoids produced their physiological and behavorial effects via non-specific interaction with cell membranes. It is now known that cannbinoids interact with specific membrane-bound receptors

commonly found in mammals, birds, fish and reptiles. At present, there are two known types of cannabinoid receptors, termed CB1 and CB2.

When considering cannabis as an alternative medicine, it is important to remember that each cannabis strain has a unique chemical composition with varying amounts of THC, THCV, CBG, CBC, CBN, and CBD. Each strain can affect each person differently. Additionally, cultivation artists are taking cannabis strains and altering their genetic DNA by breeding the best characteristics from each plant. Thus, there are thousands of different variations of the cannabis plant.

Probably the most known cannabinoid found in marijuana is THC. This psychoactive cannabinoid is responsible for producing the sense of euphoria associated with cannabis consumption. However, more recently CBD has also been gaining in popularity particularly for medical applications.

Nonetheless, there are more cannabinoids that are currently being studied including:

- THC (Tetrahydrocannabinol)
- CBD (Cannabidiol)
- CBG (Cannabigerol)
- CBC (Cannabichromene)
- CBN (Cannabinol)
- CBL (Cannabicyclol)
- CBV Cannabivarin
- THCV (Tetrahydrocannabivarin)
- CBDV (Cannabidivarin)
- CBCV (Cannabichromevarin)
- CBGM (Cannabigerol Monomethyl Ether)

Tetrahydrocannabinol (THC)

If you've heard of any cannabinoid, it is likely tetrahydrocannabinol (THC). It is the most widely known of the cannabinoids and is typically found in high concentrations in most strains of the plant. THC causes the buzzed high you feel after using marijuana due to its psychoactive properties. It is the main psychoactive compound found in the plant, and marijuana is often cultivated to have higher THC levels.

THC starts in the cannabis plant in its acidic form as THC-A. This compound does not cause a high at all. Once you add heat to the mix, THC-A converts to THC, giving it the power to give you a high. THC has

such a pronounced effect on the user due to its strong ability to attach to brain receptors.

Some benefits of THC include:

- Feeling of being high
- A sense of euphoria
- Relaxation
- Pain relief
- Appetite stimulant for individuals who need to improve appetite
- Potential medicinal benefits for Alzheimer's disease, multiple sclerosis, Parkinson's disease, PTSD, cancer and Crohn's disease
- Anti-inflammatory properties
- Amplifies the senses
- Improves sense of well-being
- Promotes creativity
- Prevents nerve damage
- Antispasmodic effects to minimize spasms or convulsions, such as those in epilepsy
- Helps minimize vomiting and nausea, making it useful for cancer patients undergoing chemotherapy
- Antioxidant effect to work against free radicals in the body
- May promote growth of new brain cells and protect brain cells from damage

Potential side effects of THC include:

- Anxiety and paranoia in some people
- Confusion or disorientation
- Dry mouth and eyes
- Short-term memory problems
- Potential long-term alterations to the memory, particularly the verbal memory
- Increased heart rate
- Sense of time slowing – skewed sense of time
- Decreased body temperature
- Tremors
- Tolerance over time that reduces the effectiveness, requiring you to consume more to get the same effects

The side effects of THC often come with a dose that is too high, so lowering the dose can help minimize the effects. Side effects often vary from one person to the next.

Cannabidiol (CBD)

Another common and influential cannabinoid is cannabidiol (CBD). This non-psychoactive compound calms your high, helping to balance the effects of THC. CBD is known for many medicinal benefits and

is legal in more states than THC. Some medical marijuana users like the option to treat symptoms with minimized feelings of euphoria or lethargy in strains grown to offer higher CBD levels.

Potential benefits of CBD include:

- Calming your high
- Anti-inflammatory properties
- Neuron protection against injury and degeneration
- Mood improvement
- Pain relief
- Antipsychotic characteristics
- Potential benefits for many medical conditions, including epilepsy, cancer, depression, psychotic disorders, diabetes and anxiety
- Migraine relief
- Decreased appetite

While CBD tends to have fewer side effects than THC, some users do experience some side effects, including:

- Dry sensation in the mouth
- Low blood pressure
- Lightheadedness
- Drowsiness

The drowsiness can be a positive or negative effect depending on your goals. If you want to sleep better, the drowsiness falls under the benefits column. If you want to remain alert, drowsiness becomes a negative effect of CBD.

Cannabinol (CBN)

Cannabinol (CBN) forms through an oxidation process when THC is exposed to air. This means bud left out in the air longer than normal ends up with a higher concentration of CBN. Many users keep their marijuana in tightly sealed containers to keep air away from it, since the exposure decreases THC levels. Like THC, CBN is a psychoactive, but it performs at a much lower level than THC. CBN also differs from THC in its tendency to bind to receptors throughout the body rather than receptors in the brain.

CBN offers an advantage over THC in another way. While it is a psychoactive cannabinoid, CBN causes little to no psychoactive effects. THC content can be as high as 30 percent, but CBN typically hits 1 percent or less. While this decreased psychoactive effect dose not

appeal to recreational marijuana users who look for the high, it is an advantage to those who want the medicinal benefits without the high.

Some positive effects of CBN include:

- Feeling of drowsiness to help you sleep when combined with THC
- Appetite stimulant
- Effectiveness against antibiotic-resistant strains of MRSA infections
- Pain relief
- Anti-inflammatory with potential benefits for asthma and Crohn's disease
- Immune system regulation
- Helps relieve spasms and convulsions
- Support of bone cell growth
- Antioxidant to work against free radicals in the body
- Reduces intraocular pressure to benefit glaucoma patients

Potential drawbacks of CBN include:

- Groggy feeling
- Dizziness
- Confusion

The sedative effect of CBN makes it a popular cannabinoid for people who suffer from insomnia or sleep issues. For some people, the drowsiness created by CBN is a drawback, but many people want the sleep-inducing effects of CBN. The cannabinoid offers effects similar to pharmaceutical sedatives in smaller doses. Just 5 mg of CBN offers the same sedative effects as 10 mg of the mild pharmaceutical sedative called diazepam.

Cannabigerol (CBG)

The non-psychoactive compound cannabigerol (CBG) serves as a foundation for THC and CBD. Because it forms early in the growing cycle, CBG typically isn't found in large quantities as the plant matures. CBG receives less attention in studies on cannabinoids, but it offers the potential for significant medicinal uses. Strains of marijuana with higher CBG levels tend to minimize the negative effects of THC in many users.

Possible benefits of CBG include:

- Relief for glaucoma patients due to reduction in intraocular pressure

- Antibiotic effects with a slight antifungal effect
- Potential therapeutic effects for psoriasis and similar skin conditions
- Pain relief
- Possible anti-tumor effects to slow the growth of cancerous cells
- Antidepressant
- Mood regulation
- Antioxidant effects against free radicals in the body
- Anti-inflammatory effects
- Potential relief for inflammatory bowel disease
- Counteracts paranoia sometimes caused by THC

Cannabichromene (CBC)

This non-psychoactive cannabinoid is less known than some other types, but it still offers some impressive benefits. Even though it isn't widely known, CBC ranks as the second most available cannabinoid in marijuana even higher than the more popular CBD. CBC may help in the following ways:

- Anti-inflammatory effects against swelling and inflammation of the

intestinal tract, with the effects even stronger when combined with THC
- Anti-tumor effects showing the potential to help fight breast cancer
- Antidepressant helping to improve your overall mood
- Mild anti-fungal effects
- Antibacterial effects against E. coli, staph infections and other types of bacteria
- Potentially encourages the growth of new brain cells by increasing viability as brain cells develop
- Pain relief, although not as significant as some other cannabinoids

How Cannabinoids Interact With the Body

Located within our bodies are cannabinoid receptors known as CB1 and CB2 receptors. CB1 receptors are primarily located in the brain. These receptors specifically cluster in the basal ganglia and in the limbic system, which includes the hippocampus. In addition, you can locate these receptors in the cerebellum and in both male and female reproductive systems.

The CB2 receptor is primarily found within the immune system and is found with the higher frequency in the spleen. These receptors are linked to being responsible for anti-inflammatory actions and potentially a wide array of therapeutic effects.

Cannabis and the Endocannabinoid System

The endocannabinoid system is neuromodulatory lipids. The receptors of these lipids are located in the brain and have an impact on several physiological processes including appetite, mood, memory and pain.

The cannabinoids found within the cannabis plant are almost identical to the endocannabinoids produced in the body except for slight structural differences. In other words, your body has a predisposition to interact with cannabinoids found in cannabis.

The endocannabinoid system is also responsible for regulating our immune system and in many cases endocannabinoid deficiency could be the root cause of several conditions and diseases. In the case of

endocannabinoid deficiency, people can increase the production of endocannabinoids by ingesting cannabis.

The Combined Effects of Cannabinoids

It's easy to see the benefits of cannabinoids when you start breaking down the different types. Cannabinoids have individual strengths that are great on their own, but the combined effect of cannabinoids seems to boost the positive effects of the individual compounds. Research shows that this entourage effect can drastically change a person's reaction to marijuana.

While all marijuana comes from the cannabis plant, the specifics of that plant vary widely. There are thousands of different strains of marijuana. The chemical profile of each strain varies from the next. This means the cannabinoids and other compounds in the plant, such as terpenes, ketones, alcohols and fatty acids, come in different concentrations depending on the strain. For this reason, you might have drastically different experiences when you use two different strains of marijuana.

The concentration of those chemicals can also change the intensity of the effects of a particular cannabinoid. Research often shows that putting particular cannabinoids together can change the effectiveness or overall effects compared to using only one cannabinoid.

Having an understanding of individual cannabinoids helps you better understand how marijuana affects your body and potentially offers medicinal effects for specific conditions. If you're ready to take advantage of the positive benefits of marijuana, get started by searching for a medical marijuana doctor or a local dispensary.

Does CBD Get You High?

CBD does not get you high. As mentioned earlier, the CBD molecule is nearly identical to the THC molecule. However, because of the arrangement of these molecules, the two compounds act entirely different inside the body.

THC directly affects the body whereas CBD indirectly affects the body. This is why THC is much more apparent when ingested than CBD.

CBD Products

There are a huge number of different products containing CBD available. The variety in products allows for patients to choose from a number of ways of consuming CBD. The different methods of taking CBD will provide differences in the effects and duration of the substance.

• **CBD oil and tinctures** are among the most popular CBD products. These oils and tinctures are so popular

• **CBD capsules**. Capsules are great for oral use but they can also be broken apart and taken sublingually or under-the-tongue. Capsules tend to come on slower than the other methods of using CBD but they also last for a bit longer.

• **Smokeables and vape products** are useful for people who have acute problems like pain or panic attacks. These products can be inhaled and the effects

felt almost immediately, though they tend to wear off much quicker.

• **Topical products**. There are a number of products made with CBD that can be applied directly to the skin. These products are great because the active ingredient can be absorbed into the skin and there won't be any effects on a person's mental or physical site except where they apply it.

Benefits and Uses of CBD Oil

A finding is revealing that CBD has a huge potential in the medical market. It eases symptoms of anxiety, diminishes pain and inflammation, helps prevent seizures, and many more. Because it's a natural extract, there are few, if any, side effects at all. The extract works with the body's endocannabinoid system, which is the system's means of regulating processes, like pain, mood, appetite, and memory. CBD works with the natural system rather than being an unnatural element, so the body doesn't try to reject it. This is why it has dominant medical benefits.

While many types of research done into the effects of CBD oil has been based on animal studies and anecdotal evidence, some much clear benefits have been highlighted.

Here are seven health benefits of CBD oil that are backed by scientific evidence.

1. Can Relieve Pain

Recently, scientists have discovered that certain parts of marijuana, including CBD, are responsible for its pain-relieving effects. The human body contains a specific system called the endocannabinoid system (ECS), which is involved in regulating a variety of functions including sleep, appetite, pain and immune system response.

The body produces endocannabinoids, which are neurotransmitters that bind to cannabinoid receptors in your nervous system.

Studies have shown that CBD may help reduce severe pain by impacting endocannabinoid receptor activity,

subdue inflammation and interacting with neurotransmitters.

For instance, one study in rats found that CBD injections subdue pain response to surgical incision, while another rat study found that oral CBD treatment undoubtedly reduced sciatic nerve pain and inflammation.

Many human studies have found that a combination of CBD and THC is effective in treating pain related to multiple sclerosis and arthritis. An oral spray known as Sativex, which is a combination of THC and CBD, is approved in several countries to treat pain related to multiple sclerosis.

In a study of 47 individuals with multiple sclerosis, those treated with Sativex for one month accomplished an impressive improvement in pain, walking and muscle spasms, compared to the placebo group.

Another study found that Sativex undoubtedly improved pain during movement, pain at rest and sleep quality in 58 people with rheumatoid arthritis.

2. Could Reduce Anxiety and Depression

Anxiety and depression are prevailing mental health disorders that can have devastating impacts on health and well-being. According to the World Health Organization, depression is the single most contributors to disability worldwide, while anxiety disorders are placed sixth in position.

Anxiety and depression are often treated with pharmaceutical drugs, which can cause a number of side effects including drowsiness, agitation, insomnia, sexual dysfunction, and headache. Also, medications like benzodiazepines can be addictive and may lead to substance abuse. CBD oil has shown promise as healing for both depression and anxiety, leading many who live with these disorders to become interested in this natural approach.

In one study, 24 people with a social anxiety disorder were given either 600 mg of CBD or a placebo before a public speaking test. The group that received the CBD had automatically less anxiety, cognitive impairment, and discomfort in their speech performance, as opposed to the placebo group.

CBD oil has even been used to safely treat insomnia and anxiety in children with post-traumatic stress disorder.CBD has also shown antidepressant-like effects in many animal studies.

These qualities are associated with CBD's ability to act on the brain's receptors for serotonin, a neurotransmitter that regulates mood and social behavior.

3. Can Alleviate Cancer-Related Symptoms

CBD may help subdue symptoms related to cancer and side effects related to cancer treatment, like nausea, vomiting, and pain. One study looked at the impact of CBD and THC in 177 people with cancer-

related pain who did not experience relief from pain medication.

Those treated with an extract containing both compounds experienced a rapid reduction in pain compared to those who received only THC extract.

CBD may also help subdue chemotherapy-induced nausea and vomiting, which are among the most common chemotherapy-related side effects for those with cancer. Though there are drugs that help with these distressing symptoms, they are most time ineffective, leading some people to look for alternatives.

A study of 16 people undergoing chemotherapy found that a one-to-one combination of CBD and THC administered via mouth spray reduced chemotherapy-related nausea and vomiting better than standard treatment alone. Some test-tube and animal studies have even shown that CBD may have anticancer properties. For instance, one test-tube study found that concentrated CBD induced cell death in human breast cancer cells.

Another finding showed that CBD inhibited the progress of aggressive breast cancer cells in mice. However, these are test-tube and animal studies, so they can only predict what might work in people. More studies in humans are necessary before conclusions can be made.

4. May Reduce Acne

Acne is a rampant skin condition that affects more than 9% of the population. It is thought to be caused by a number of factors, including genetics, bacteria, underlying inflammation and the overproduction of sebum, an oily secretion made by sebaceous glands in the skin. Findings from recent scientific studies showed CBD oil may help treat acne due to its anti-inflammatory properties and ability to reduce sebum production.

One test-tube study showed that CBD oil prevented sebaceous gland cells from secreting excessive sebum, exerted anti-inflammatory actions and stopped the activation of "pro-acne" agents like inflammatory cytokines.

Another finding concluded that CBD may be an efficient and safe way to treat acne; thanks in part to its remarkable anti-inflammatory properties. Though these results are encouraging, human studies exploring the effects of CBD on acne are needed.

5. Might Have Neuroprotective Properties

Researchers believe that CBD's ability to act on the endocannabinoid system and other brain indicating systems may provide benefits for those with neurological disorders.

One of the studies uses for CBD is in treating neurological disorders like epilepsy and multiple sclerosis. Though research in this area is still new, many studies have shown promising results. Sativex, an oral spray consisting of CBD and THC, has been proven to be a safe and effective way to subdue muscle spasticity in people with multiple sclerosis.

One study showed that Sativex reduced spasms in 75% of 276 people with multiple sclerosis who were experiencing muscle spasticity that was resistant to

medications. Another study administered 214 people with severe epilepsy 0.9–2.3 grams of CBD oil per pound (2–5 g/kg) of body weight. Their seizures subdued by a median of 36.5% (27).

However, it is worthy to note that some people in both these studies experienced detrimental reactions associated with CBD treatment, such as convulsions, fever, and diarrhea. CBD has also been researched for its potential effectiveness in treating many other neurological diseases.

For example, many studies have shown that treatment with CBD improved quality of life and sleep quality for people with Parkinson's disease.

More also, animal and test-tube studies have shown that CBD may decrease inflammation and help prevent the neurodegeneration connected with Alzheimer's disease. In one long-term study, researchers administered CBD to mice genetically predisposed to Alzheimer's disease, finding that it helped prevent cognitive decline.

6. Could Benefit Heart Health

Recent research has associated CBD with several benefits for the heart and circulatory system, including the ability to lower high blood pressure. High blood pressure is related to higher risks of a number of health conditions, including stroke, heart attack, and metabolic syndrome. Studies show that CBD may be a natural and effective remedy for high blood pressure.

One recent study treated 10 healthy men with one dose of 600 mg of CBD oil and found it reduced resting blood pressure, compared to a placebo. The same study also gave the men stress tests that ordinarily increase blood pressure. Interestingly, the single dose of CBD led the men to experience a smaller blood pressure progress than normal in response to these tests. Researchers have suggested that the stress- and anxiety-reducing properties of CBD are important for its ability to help lower blood pressure.

Additionally, several animal studies have shown that CBD may help reduce the inflammation and cell death related to heart disease due to its dominant antioxidant and stress-reducing properties. For example, one study found that treatment with CBD reduced oxidative stress and stopped heart damage in diabetic mice with heart disease.

7. Several Other Potential Benefits

CBD has been observed for its role in treating a number of health issues other than those mentioned above. Though more studies are needed, CBD is believed to provide the following health benefits:

Antipsychotic effects: Research shows that CBD may help people with schizophrenia and other mental disorders by reducing psychotic symptoms.

Substance abuse treatment: CBD has been shown to alter circuits in the brain related to drug addiction. In rats, CBD has been shown to reduce morphine reliance and heroin-seeking behavior.

Anti-tumor effects: In test-tube and animal studies, CBD has shown anti-tumor effects. In animals, it has been demonstrated to prevent the spread of breast, prostate, brain, colon and lung cancer.

Diabetes prevention: In diabetic mice, treatment with CBD subdued the incidence of diabetes by 56% and greatly reduced inflammation.

CBD for Psychosis and Schizophrenia (What research Says)

It's important to point out that the majority of CBD medication is administered with an oil tincture. While we won't go into any detail here in this article on the differences between the various types of therapies, the vast majority of medical patients prefer this method because it involves no smoking, and it doesn't produce a high.

In any regard, in one important study published last year (2017) in The American Journal of Psychiatry, it was disclosed that CBD may be a reliable treatment for schizophrenic victims suffering from hallucinations and delusions. The American Journal

of Psychiatry is one of the leading sources for reliable news on psychiatric treatments, and this study was especially important as it was believed to be the first actual clinical trial of CBD for schizophrenia. There have been plenty of animal studies done in the past in regard to marijuana for psychosis, but due to regulations, it is rare for an actual clinical trial to be carried out.

In any regard, the study showed that the active cannabidiol (CBD) compound works to potentially limit the amount of dopamine that is blocked as a result of pharmaceutical drug treatment. (The CBD was administered in correspondence with other medications). Of the 83 patients that were tested, all who were given CBD treatment experimented "dramatic improvements" in their symptoms, compared to the control group that was given placebo:

"The data indicate that six weeks of treatment adjunctive to antipsychotic medication was associated with significant effects both on positive psychotic symptoms and on the treating clinicians' impressions of improvement and illness severity."

Pretty astounding news, considering the fact that CBD had never before showcased in a clinical trial to alleviate the effects of psychosis and antipsychotic medications.

Additionally, a January 2017 publication from the Neuroscience and Biobehavioral Reviews showed that CBD can in itself potentially act as an antipsychotic medication.

The study, which was carried out at the Illawarra Health and Medical Research Institute (IHMRI), proved that active cannabidiol compound can "influence learning, memory and attention, [and also offer] potential solutions to several core symptoms of schizophrenia that can be a challenge to alleviate with existing medicines…"

While it's known that common antipsychotic medications are effective at treating symptoms of delusion and hallucinations, it's generally regarded that they're less effective at improving cognitive malfunctions, such as social withdrawal and "blunted emotional expression."

As project leader Dr. Katrina Green claims, “From this review, we found that CBD will not improve learning and memory in healthy brains, but may improve aspects of learning and memory in illnesses associated with cognitive impairment (such as psychosis and schizophrenia).”

CBD oil and schizophrenia (How it works)

Marijuana is often seen to have more positive impacts than negative ones when it comes to human health. It has also been used as a very effective treatment for various mental and physical issues for a very long time. Marijuana, along with other plants from the cannabinoids family is very rich in THC and CBD content. While THC is entirely a psychotic substance, CBD only initiates several reactions in the body without producing any psychotic effect.

CBD oil has also been seen as a very promising cure for schizophrenia at all stages. The medical community studying CBD has revealed that the oil can, in fact, be highly effective in creating a positive impact on various mental illnesses including

schizophrenia. CBD for Schizophrenia can be a highly instrumental remedy option, especially for patients who have shown little positive response to other drugs marketed over the counters

When compared to using cannabis, CBD oils have a highly reduced risk for THC side effects such as weight gain, increased prolactin levels, and movement disorder. It has been seen that CBD oils are most effective when used during the earlier stages of schizophrenia and other mental illnesses. The compound is associated with effectively managing the anxiolytic and antipsychotic effects associated with the condition. This is because CBD oils trigger an increase in the secretion of anandamide, which further goes and stops various dopamine-related activities in the body, thus neutralizing the increased secretion of dopamine.

The other benefits of CBD oil are that it is highly tolerated by the body and therefore much safer as compared to most other anti-psychotic drugs. Although evidence only points towards the effectiveness of CBD in treating schizophrenia,

researchers are still on their way and the compound will be put under various testing and clinical trials before it can finally be declared as an acceptable treatment for schizophrenia.

How to use CBD oil For Schizophrenia?

There are two ways of using CBD oil for Schizophrenia, vaping and capsules. Vaping ensures that the CBD is immediately absorbed by the body, thus providing quick results. It also does not produce thick clouds of smoke or leaves behind the annoying odor. However, if you do not want to go through the hassle of vaping, you can use oils for the same effect.

Dosage to treat CBD Schizophrenia

For schizophrenia, patients are usually given 3 drops each, 3 times a day, once in the morning, once during the daytime and once during the evening. Here, the oil used is not entirely CBD oil, but rather a formulation that contains about 2 to 5 % of CBD, which accounts for about 3 to 10 mg of CBD per dosage. This, however, is just an example and the actual dose can vary from person to person depending on the severity

of the condition and other individual medical needs. It is practical to start with a very small drop count and gradually increase or decrease the dosage depending on how your body reacts to it.

Facts that you must know

• Schizophrenia is related to a reduced life expectancy by almost 10 to 15 years

• Since schizophrenic is not able to tell the difference between what is real and what is not, they are usually not aware of the condition all by themselves

• It is more common for schizophrenia to begin in early ages than in adulthood

• CBD oils can bring about significant changes in as little as 48 hours

• Since CBD oils do not have THC, they are easily available as completely legal over the counter products

• CBD oil does not make you high

• CBD mainly works by neutralizing out the effects on Dopamine 2, which is related to schizophrenia

• CBD is not only effective in treating Schizophrenia but also a multitude of other mental health disorders

CONCLUSION

CBD is currently seen as the most promising treatment for Psychosis & schizophrenia. It is very easy to administer and produces a very quick result. Using CBD oil for Psychosis & Schizophrenia has also been known to be more effective as compared to using other drugs. Furthermore, it does not leave behind any serious consequences or side effects. However, for the time being, it is still being studied extensively and only considered as an optional treatment.