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Everything You Need To Know About Cannabinoids

The prevailing research of cannabinoids in the 20th century led to the vast acceptance and usage of the compound in different products. Medical experts have incorporated cannabinoid compounds into oils, pills, creams, and even edibles, as approved by the Food and Drug Administration, for people to experience its health benefits.

The use of cannabinoids products is widespread among Canadians, with nearly 20% of those aged 15 or older, or almost 6.2 million, reporting using cannabis-based products.

Cannabidiol, on the other hand, is not widely accepted in other countries due to social stigma and laws imposed in the country where the compound originated. People ignore the medical benefits of cannabinoids due to a lack of knowledge, which impedes potential cannabinoid research.

To truly understand the potentials of cannabinoids and eliminate the stigma, let us delve deeper into the compounds.

What are Cannabinoids?

A cannabinoid is a naturally occurring compound produced by the cannabis plant's glandular trichomes. One trichome can contain over 100 different cannabinoids, whereas the entire plant contains over 500 compounds, at least 113 of which are cannabinoids.

Cannabinoids can control how our nerves function as well as maintain internal body stability. It keeps the body healthy by boosting the immune system's ability to fight off various diseases that enter the body.

Types of Cannabinoids

- CBG (Cannabigerol)
- THC (Δ9–tetrahydrocannabinol)
- CBD (Cannabidiol)
- CBC (Cannabichromene)
- CBGV (Cannabigerivarin)
- THCV (Tetrahydrocannabivarin)
- CBDV (Cannabidivarin)
- CBCV (Cannabichromevarin)

Each cannabinoid is distinguishable by the degree of psychoactivity it elicits when consumed. Cannabigerol (CBG), Cannabichromene (CBC), and Cannabidiol (CBD) are examples of well-known non-psychoactive compounds, whereas delta-9-tetrahydrocannabinol (THC), and Cannabinol (CBN), have varying degrees of psychoactivity.

Two commonly known cannabinoids are THC, which makes a person "high" due to its psychoactive property, and CBD, known for its medical applications. Apart from that, the two compounds have been used together in medical practice to treat specific diseases.

Cannabinoid compounds with practical applications include cannabigerol (CBG), which is used as an antibacterial and antimicrobial compound. Cannabinol (CBN) is another substance that reduces anxiety and relieves muscle spasms.

Cannabinoids can be combined to produce a variety of effects. Many people have attempted to combine compounds for medical reasons, while others have done so for recreational purposes.

How do Cannabinoids work?

Our bodies perform numerous vital functions, including homeostasis, emotion, appetite, sleep, and many others. It can also function similarly to the cannabis plant,

producing cannabinoids via the endocannabinoid system (ECS) or bliss molecule. People frequently regard cannabinoids as unethical or illegal, oblivious to the fact that their ECS produces cannabinoids.

Cannabinoids bind to various cannabinoid receptors when they enter your body via smoking or ingestion. One such example is the use of the marijuana plant. The drug binds to the brain's cannabinoid receptors. Its widespread effect can result in a variety of outcomes, such as medication, psychological stability, physical control, heightened mood, and increased appetite.

What is the Endocannabinoid System?

The ECS is in charge of signalling the nervous system throughout the human body in order for it to perform bodily functions while remaining psychologically, emotionally, and cognitively stable. It also regulates the body's cardiovascular, immune, nervous, and digestive systems, all of which are vital in our daily lives.

By producing cannabinoids, the ECS can activate cannabinoid receptors found naturally in the body. Each cannabinoid acts independently on the CB1 receptor in the immune system and the CB2 receptors in the brain, nerve endings, and nervous system. This is why we feel pain after an injury or get a fever when exposed to unknown viruses. The ECS signals the nerve receptors to respond to both external and internal stimuli.

Medical Usage of Cannabinoids

The various compounds found in cannabinoids have long been studied and used in medical treatments. Recent discoveries have added to the limited knowledge about cannabinoids in medicine, causing an increasing number of people to accept cannabinoids as a source of medication.

Here are some of the most notable medical applications of cannabinoids to help you better understand their use in medicine:

- **Chronic Pain**

The Canadian Centre on Substance Use and Addiction investigated the effectiveness of cannabis and cannabinoids in relieving symptoms brought about by severe and chronic conditions that are commonly associated with pain. The results show that cannabis and cannabinoids can effectively treat the said conditions if the correct dosage or amount of cannabinoids is consumed.

Another study regarding the therapeutic potential of cannabis and cannabinoids found that cannabinoids are effective against neuropathic pain. The study results also show that it is effective against tumor pain, rheumatism, and fibromyalgia.

- **Anxiety**

CBD and THC are known to relieve anxiety. The compounds interact with the brain's cannabinoid receptors and alter serotonin levels to ease the feeling of anxiety. It works similarly with an antidepressant commonly administered to regulate serotonin levels, although the cannabinoids are more organic and have additional health benefits.

Cannabinoids are found to be beneficial, especially for people suffering from depression caused by anxiety and stress. Its usefulness is essential, especially for students having mental problems that may lead to suicidal thoughts or even suicide.

- **HIV**

According to the same study on the therapeutic potential of cannabis and cannabinoids, HIV patients who smoked cannabis cigarettes reported an increase in appetite, which resulted in a decrease in weight loss. Consuming cannabis-derived products or medical marijuana can also help with muscle soreness and nausea, two of the most common AIDS symptoms.

- **Cancer**

Medical marijuana has helped cancer patients in various ways, including reducing nausea and vomiting, relieving pain, increasing appetite, and reducing anxiety. Cannabinoid compounds supplement the traditional medicines prescribed to patients, improving their medication.

Conclusion

Since discovering the endogenous cannabinoid system two decades ago, cannabis-based medications have been the subject of intense research. Studies on its psychological effects, medical use, and chemical composition are currently being conducted to fully understand the complexity of its compounds and what other therapeutic properties can be derived.

Commercially available cannabinoids will become more prevalent in the future, as will the legalization of marijuana for medical purposes in other countries.

As more countries legalize cannabis plant cultivation based on medical evidence, it is foreseeable that cannabinoids will become a critical product throughout the world, as long as the dosage prescribed is correct. It will be a groundbreaking achievement that will secure humanity's future by assuring people of its significant medicinal value and health benefits.