CBG Research



Abstract

CBG (cannabigerol) is a cannabinoid (active chemical) in marijuana that occurs at small concentrations. CBG is overviewed in our in-depth study covering the effects of CBG in cannabis, medical research results, and goals concerning the CBG cannabinoid in medical marijuana.

CBG Defined

CBG (cannabigerol) is one of the minor chemical components in marijuana, found at moderate concentrations. Research shows that CBG works to make an important role in the endocannabinoid system despite the small amounts present in cannabis buds.

Researchers speculate CBG helps to increase the effects of marijuana as a whole, also referred to as "The Entourage Effect".

CBG Current Research

The cannabinoid CBG, is one of the many active components in cannabis that make it suitable for medical marijuana usage. Marijuana cannabinoids are over a hundred different types, and each cannabinoid has a specific effect on the human brain and body.

After THC, CBD, CBC, and CBN, the effects attributed to CBD can range from euphoria and relaxation to anxiety and dizziness. With the exception of THC and CBD, it is difficult to consume single cannabinoids at a high level for most practical users, and it is because of the way they are produced in the marijuana plant.

Research shows the ability to detect and study the effects of CBG in marijuana, which shall improve in future times.

CBG Science

CBG starting out is also known as cannabigerolic acid (CBGA). This is not a phenomenon unique to CBG, as all cannabinoids begin life as acidic compounds. THC begins begins as CBDA as THCA or CBD, and so on and so forth.

These cannabinoids lose their acidity by a method such as the decarboxylation, which is known to occur when the cannabis is heated to a hot temperature. Common methods are decarboxylation lightly heating marijuana to smoking or cooking in the oven, before use with a food. As a result, the carboxylic acid molecule's rotation goes from CBGA to CBG.

Decarboxylation transforms cannabinoids into a pharmacologically active form. THCA does not provide the euphoric high THC effect of being "stoned". Since most of the research has focused on active versions of cannabinoids, we do not know about the minor cannabinoids decarboxylated as CBGA.

To understand the importance of CBG needs to go further back into what makes up the cannabis plant. CBGA is the basis of the "big six" most wanted cannabinoids: THC, CBD, CBC, CBN, THCV and CBG.

All these cannabinoids start as a CBGA cannabinoids before they are processed by enzymes in the trichomes of marijuana. As the reaction progresses, the synthesis of CBGA happens into THCA CBDA, CBCA, and so on. During a typical flowering cycle, this process usually takes six to eight weeks.

There is only so much cannabinoids to synthesize the present CBGA in a plant, when large amounts THCA, this may be a small amount of other cannabinoids transformation (or continue as CBGA). This is why most strains of marijuana are high in THC, but relatively low in all other cannabinoids.

This process got CBG or more specifically, CBGA the nickname "the mother of all cannabinoids".

CBG Effects

When CBG is in such low concentrations in marijuana, it would be impossible for anyone to a particular strain of smoke and a specific action she feels able to contribute directly to the CBG. By isolating the CBG and conducting tests, the researchers were able to determine how the different results are attributed to CBG.

CBG Medical Benefits

CBG does not produce the powerful psychotropic effects attributed to THC, which may make the cannabinoid more widely accepted in medical research social circles.

CBG For Anxiety and Depression?

CBG acts as a CB1 antagonist, to prevent part of the "high" effects of THC. It can also increase the levels of anandamide, the "happiness molecule" in the brain that controls feeling for such things as appetite, sleep and mood. It may help block MEB serotonin receptors, which is why it is a potentially useful anti-depressant. MEB also acts as an inhibitor of GABA uptake, which means that it can help reduce anxiety and muscle tension.

CBG (cannabigerol) rises to combat levels of natural chemicals in the brain that cause anxiety and depression.

CBG for Glaucoma?

For years, patients have used medical cannabis for treatment of glaucoma, but does the cannabinoid CBG have any effect on glaucoma? Studies have shown that cannabigerol and other cannabinoids work well to reduce intraocular pressure when it is locally and systemically administered at a time. Although the amount of CBG is not high enough in most strains of marijuana to have an individual effect, serves to promote this theory, rhythm works together toward a common goal of the cannabinoids, producing the "wake up effect".

CBG for IBD?

Over the years, much anecdotal evidence of patients has shown that marijuana helped calm their inflammatory bowel syndrome. A 2013 study of these experiences found that CBG contributed to inflammation of the colon in mice. CBG is so effective that the researchers recommended clinical trials in patients with human IBD.

A 2018 study, researchers from the University of Bath have provided more supporting evidence that marijuana cannabinoids are naturally based in body's endocannabinoid system to help cases of intestinal inflammation. While doctors still cannabis as a treatment for IBD side effects, future research may show better results in confirming the practical usage of CBG for IBD.

CBG as a Neuroprotective?

Huntington's disease is a genetic disorder that causes nerve cells in the brain time to break. Researchers have studied in 2015 or cannabigerol brain cells may help protect people with the disease. Studies have shown that CBG has neuroprotective properties, and much research to find out whether it needs alone or in combination with other treatments that open the door for CBD used as a possible treatment for this devastating disease in rats.

CBG for Cancer?

The researchers examined many cannabinoids have anti-tumor properties, and CBG is no exception. In a 2014 study of colon cancer in mice, the researchers found that CBG can help lock carcinogenesis (the formation of new cancer cells). What this means for treatments outside the laboratory, remains to be seen, but the results are promising. CBG kill cancer cells

CBG Cannabinoids may prevent certain types of cancer cells to grow.

CBG as an Antibacterial?

A major problem was with resistance to antibiotics in the world of medical scientists is to study traditional medicine alternatives that are beginning to kill bacterial infections. In a study examined the antibacterial activity of cannabigerol (CBG), cannabichromeen (CBC), tetrahydrocannabinol (THC), cannabidiol (CBD) and cannabinol (CBN). The five cannabinoids have demonstrated potent activity against MRSA bacterial strains, but scientists have not been able to determine their mechanism of action.

CBG for Appetite Stimulation?

THC has long been known as an appetite stimulant, which is why marijuana such an effective treatment for people who lose weight via AIDS or chemotherapy side effects. The researchers found that even when you remove the THC, the cannabinoids successfully stimulates the appetite in rats they studied. The theory is that cannabinoids help in producing appetite stimulation.

CBG for Bladder Dysfunction?

In 2015, a group of researchers set out to examine the anecdotal claims that cannabis was useful for people with bladder dysfunction. One study found that in other cannabinoid CBG was useful for decreasing bladder contractions mice as human bladder.

CBG FAQ

What is CBG?

CBG, also known as cannabigerol, is a cannabinoid - an active ingredient of cannabis. With more than 100 other cannabinoids, it helps to create the effect of the signing of marijuana and health benefits. CBG found in marijuana is at very low concentrations as an active cannabinoid.

Before a cannabis plant matures, the CBGA is converted to synthesis gas THCA or CBDA and precursors of more other cannabinoids which turn into the better known cannabinoids THC or CBD when decarboxylated.

What are the effects of CBG?

The effects of CBG are not noticeable in most strains of marijuana. Scientists believe that because it stimulates the endocannabinoid system, CBG may help to promote positive brain functions.

Do you have a high effect at all with CBG?

Not high. In fact, the opposite. CBG acts as an inhibitor of the CB1 receptor by limiting the high THC effects. That means, in addition to causing a psychotropic effect of its own, can CBG actually work to reduce the high created by THC.

What are the health benefits of CBG?

Cannabinoids such as CBD and CBG exist in the brains levels as natural chemicals that make it useful as an anti-anxiety and antidepressant treatment. It helps to reduce intraocular pressure in patients with glaucoma and is an excellent anti-inflammatory. Physicians and as neuroprotective agents for people with degenerative brain diseases such as Huntington's disease agent to the CBG and tumor potential of certain types of breast cancer. It also kills bacteria that stimulates the appetite and reduce bladder contractions in people with diseases of the bladder.

Although not a large part of most strains of marijuana, non-psychotic CBG has many potential medical applications.

CBG Research Conclusions

Since CBGA, the predecessor of the CBG, the mother of many major cannabinoids, has been the source of much of the strength of the cannabis plant. Aside from the fact that his predecessors in other cannabinoids synthesis, scientists are still learning about the many effects of CBG, making it a potent cannabinoid in its own right. Further research will help reveal the mechanisms at work (CBG cannabigerol), and what it means for users of medical marijuana and recreational cannabis community.

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