

## The Benefits of CBG

Though lesser known among the general public, CBG has come to the forefront of cannabis research over recent years. This cannabinoid has shown incredible therapeutic potential in various trials and studies, and as CBG research continues, scientists suggest that this “minor” cannabinoid may rival even CBD in its therapeutic potential.

With scientific literature and clinical trials continuing to illustrate the amazing range of benefits that CBG can offer, it is impossible to overestimate the range and scope of benefits that CBD formulas rich in “minor” cannabinoids such as CBG can provide.

From sourcing to processing, Goldvana strives to include and preserve minor cannabinoids such as CBG to enhance the therapeutic value of its CBD products. The importance of doing so should not be underestimated, though unfortunately, this is often the case with the majority of cannabis companies and products in the industry today.

But what is CBG, and why is the presence of this “minor” cannabinoid so important to the therapeutic value of Goldvana’s CBD products? How does CBG enhance the effects of CBD, and what are CBG’s benefits?

In this article, we provide an overview of everything you need to know about CBG, from the basics of how the cannabinoid interacts with the human body, to the findings in scientific research and clinical trials that explain how and why CBG has exhibited such remarkable holistic benefits. In doing so, we hope to illuminate why researchers find CBG’s benefits so remarkable, why this cannabinoid has such remarkable therapeutic potential.

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### What is CBG?

Like CBD, CBG is a “minor” cannabinoid synthesized by the hemp plant in reaction to heat and light under natural growing conditions. There are over one-hundred different cannabinoids in the hemp plant, each of which carries its own distinctive benefits and therapeutic properties.

Unlike many other cannabinoids, CBG binds directly with CB1 and CB2 receptors. In other words, CBG interacts with regions of the body and brain that CBD alone cannot reach--this is why formulas rich in these “minor” cannabinoids are so much more effective than products that contain CBD alone. By combining CBD with minor cannabinoids such as CBG, Goldvana offers a formula that harnesses all of the potential benefits that the hundreds of cannabinoids in the hemp plant has to offer. These cannabinoids synergize with CBD to enhance its potency

and effectiveness, while amplifying the therapeutic scope and multiplying the benefits of the product as a whole. As a result, Goldvana's cannabinoid-rich products offer exponentially more therapeutic properties than common CBD products, which often fail to harness the incredible benefits that minor cannabinoids such as CBG can provide.

CBG is the precursor compound to CBD, and as such, it is referred to by some as the "mother" cannabinoid: as the hemp plant matures, CBG converts into CBD, though trace amounts of this cannabinoid remain in the mature, cannabinoid-rich hemp plants when they are ready for harvest. Because it is present in smaller concentrations than CBD, however (which accounts for over 40% of the hemp plant), CBG is referred to as a "minor" cannabinoid--despite the fact that it offers *major* benefits.

## What are the Benefits of CBG?

Clinical trials and advancements in cannabis research have suggested that CBG yields invaluable therapeutic benefits. Many of CBG's benefits are similar to those of CBD, while CBG also offers several distinctive benefits that even CBD and other better-known cannabinoids cannot provide.

CBG synergizes with CBD to enhance its effects. Unlike CBD, CBG has the ability to cross the blood-brain barrier, facilitating cannabinoids' journey from the bloodstream to the brain, where they bind with cannabinoid receptors to produce their effects. This is true of both CBD and CBG. CBG, however, binds with certain receptors that CBD and other cannabinoids cannot reach, and, as a result, CBD products that contain this cannabinoid produce benefits that are unobtainable with CBD alone. Moreover, CBG is unique in that it has the ability to cross the blood-brain barrier, and as such, its presence in a cannabinoid-rich formula makes CBD and other cannabinoids more effective overall.

CBD is believed to carry various benefits for our physical and mental health. Below, we discuss some of the benefits that evidence suggests CBG may provide.

### **The Neurological Benefits of CBG**

Some of the most groundbreaking studies on CBG have focused on its potential [neurological](#) benefits, which continue to attract scientific attention as research on this cannabinoid continues. Some scientists believe that CBG may stimulate cell growth in important regions of the body and brain where cell rejuvenation is needed as the body begins to age over time. In many studies, CBG has shown highly promising results as an aid to neurological health. This has galvanized prolific research on its potential neurological benefits, while scientific interest in CBG's potential neurological benefits continues to increase.

### **CBG and Mood: Anandamide, or "The Bliss Molecule"**

Studies suggest that CBG supports mental wellness by increasing the presence of neurotransmitters associated with positive emotions. CBG binds directly with certain receptors that CBD cannot reach, which is why cannabinoid-rich formulas that include CBG offer superior

mental health benefits. By binding with CB1 receptors in the central nervous system--the epicenter for the majority of physiological processes that impact our mental health--CBG is thought to promote emotional well-being by increasing levels of anandamide, dopamine, serotonin, and GABA.

CBG [increases levels of anandamide](#) in the brain. Anandamide is an endocannabinoid and neurotransmitter associated with feelings of happiness, balanced sleep cycles, healthy appetite, and reduced stress. Anandamide is sanskrit for "the bliss molecule," and this neurotransmitter earns its name from the feelings of euphoria that it is known to produce. Exercise, for example, stimulates anandamide production, and anandamide is responsible for the euphoria associated with a "[runner's high](#)." By increasing levels of anandamide on a regular basis, CBD that contains CBG and other cannabinoids offer similar mental health benefits.

Anandamide is an endocannabinoid naturally produced by the human body, though common physiological processes in certain regions of the brain often result in anandamide levels that are too low (and this, in turn, may result in negative symptoms related to mental health). This is because anandamide occurs in the same region of the brain as certain enzymes known to diminish this neurotransmitter and break down its delicate chemical structure. CBG and other cannabinoids inhibit these enzymes' ability to diminish anandamide levels, thereby increasing the presence of anandamide in the brain.

#### **CBG, Serotonin, and Emotional Wellness**

Studies suggest that by increasing anandamide, cannabinoids such as CBG may [increase the presence of serotonin](#) in the brain. Serotonin is a neurotransmitter known primarily for its positive impact on mood, and associated with feelings of happiness; this neurotransmitter promotes emotional well-being, while improving mood and promoting a positive mental state. Like anandamide, serotonin is naturally produced by the body, yet natural processes in the brain often result in serotonin deficiency. [Low serotonin levels](#) are associated with a wide variety of mental health issues, and the majority of therapeutic treatments used to manage such issues are designed to increase serotonin levels in the brain. Healthy serotonin levels are crucial to nearly all aspects of our mental health. [One prominent study](#) suggested that by increasing anandamide--which, subsequently, interacts with our serotonin receptors--cannabinoids such as CBG and CBD stimulated the production of serotonin by 89%, while inhibiting the neurological processes responsible for serotonin deficiency by 36%.

#### **CBG, Motivation, Energy, and Focus**

Anandamide is also linked to the production of dopamine, and by increasing anandamide levels in the brain, CBG is thought to [stimulate dopamine production](#) as well. Dopamine is a neurochemical associated with the reward system, motivation, focus, energy, improved mood, and more. Thus CBG may benefit issues related to attention, low energy levels, and motivation. Dopamine is crucial to the proper functioning of the reward system, which is essential to the motivation necessary to accomplish any given task, and to the ability to find gratification and a sense of reward associated with achieving these goals.

### **CBG for Stress Management**

Cannabis researchers have suggested that CBG may act as a [GABA reuptake inhibitor](#), which makes this cannabinoid especially promising as an anxiolytic. GABA is a neurotransmitter that is responsible for reducing excitability in certain regions of the brain--this excitability is widely associated with feelings of stress and [anxiety](#). Like serotonin and anandamide, however, GABA levels are often depleted by natural neurological processes that cause us to become deficient in this neurotransmitter--as a result, we may experience stress-related symptoms. By inhibiting the processes responsible for GABA deficiency--specifically, GABA reuptake--CBG increases GABA levels in the brain. Many therapeutic treatments for stress management operate through the same mechanism of action. Healthy GABA levels are associated with decreased stress and anxiety, and overall feelings of calm and relaxation.

### **CBG for Inflammation**

Like CBD, CBG is known for its [anti-inflammatory](#) properties. Yet these two phytocannabinoids work in different areas of the body to combat inflammation in different ways. When combined in a cannabinoid-rich formula, CBD and CBG work together to target inflammation from all angles, offering a more holistic, comprehensive approach to inflammation management.

CBG is unique in that it binds directly with the CB1 receptors responsible for the neurological signalling responsible for the way in which we experience inflammation-related [pain](#). As a result, CBG may aid inflammation by modulating the neurotransmission responsible for our sensitivity to inflammation-related pain, and decreasing the severity of the painful sensations associated with inflammation.

### **CBG for Pain**

Like CBD, CBG is believed to carry analgesic properties, and may reduce our sensitivity to pain while dulling the intensity of painful sensations. By binding with CB1 receptors in the central nervous system, CBG is believed to modulate the neurological activity responsible for our sensitivity to pain, and the severity of the painful sensations we experience. Due to its ability to intervene in these neurological processes, CBG may be particularly useful for [neuropathic pain](#), which is related to faulty pain signalling in the central nervous system.

### **CBG and Eye Health**

CBG and CBD produce their benefits through their interaction with cannabinoid receptors, which regulate physiological processes in different areas of the body and brain. Cannabinoid receptors are found in abundance throughout the eye area, and studies have suggested that CBG may bind with these receptors to reduce [ocular discomfort](#), and support overall eye health.

## How CBG Enhances CBD: Minor Cannabinoids and The “Entourage Effect”

Though it may be considered a “minor” cannabinoid, CBG makes major contributions to the therapeutic value of CBD products. For the reasons and research cited herein, Goldvana has included CBG in all of its CBD line. CBG has many of its own distinctive benefits that CBD, alone, can't offer. Yet this minor cannabinoid also enhances the effects of CBD, and as a result, Goldvana products--which are rich in minor cannabinoids such as CBG--offer the widely sought [“entourage effect”](#): a gold standard for quality, potency, and effectiveness among consumers of CBD products.

Goldvana's cannabinoid-rich tinctures combine CBD with minor cannabinoids such as CBG, and as a result, they produce benefits unobtainable from either cannabinoid in isolation--or from commonly-sold CBD products that fail to harness the benefits that these minor cannabinoids have to offer. Over the past three decades, [countless scientific studies have confirmed](#) that CBD is more potent, effective, and offers more benefits when it is consumed in combination with other cannabinoids such as CBG. This is because “minor” cannabinoids synergize with CBD to increase its potency, multiply its benefits, and widen the scope of benefits that a cannabinoid-rich CBD product can provide.

In short, cannabinoids are always more effective when they are working together, and for this reason, Goldvana strives to harness the benefits of CBG and other minor cannabinoids in all of its CBD products.