

# CBG

## What is CBG?

Cannabigerol, is often called the "mother of all cannabinoids" because it's the precursor from which other compounds like CBD, THC, and CBC are made

It interacts with the body's endocannabinoid system (ECS) to support wellness, with potential benefits for anxiety, inflammation, appetite, and gut health, and is often used for daytime focus or combined with CBD for enhanced effects.



Valued for supporting focus and energy without intoxication, making it great for daytime use.

CBG converts from its acid form cannabigerolic acid (CBGA), which is the principal precursor to most of the other cannabinoids found in cannabis, such as Δ-9-THC, CBD, cannabidiol (CBD), and cannabichromene (CBC)

## Top Medical Uses

Animal studies, and self-reports or research in humans, suggest CBD may also help with:

### 01

#### Neuroprotection

CBG has been shown to block pain and inflammation associated with collagen-induced osteoarthritis.

Cannabinoids like CBG act on inflammation differently than non-steroidal anti-inflammatory drugs (NSAIDs) do, and don't have the side effects of these medications.



### 02

#### Brain Cells

In a 2013 mouse study, CBG had a positive effect on neural stem progenitor cells (NSPCs), a cell essential to healthy brain function.

NSPCs became more viable when in the presence of CBG, and that shows promise because NSPCs differentiate into astroglial cells, the most important cells for maintaining brain homeostasis.

- Neurotransmitter direction and defending against oxidative stress.
- Inflammation
- Toxicity—that create neurological diseases and brain pathologies like Alzheimer's disease.



### 03

#### Acne

CBG has been shown to be a powerful inhibitor of acne.

As a skin disease, acne is characterized by excess sebum production and sebaceous gland inflammation. It turns out that CBG exhibited powerful anti-inflammatory properties and also suppressed excessive lipid production in the sebaceous glands.



CBG also reduced levels of arachidonic acid (AA), which is needed to create the lipogenesis.



### 04

#### Depression

In another amazing display of the entourage effect, CBG appears to work in conjunction with both THC and CBD to deliver a trifecta of antidepressant properties.

More research is in progress to determine more information.

# CBD

## What is CBD?

CBD, or cannabidiol, is the second most prevalent active ingredient in cannabis

It is derived directly from the hemp plant.

A recent study in the journal Neuropsychopharmacology concluded that "acute CBD alone is unlikely to significantly impair daily functioning or workplace performance."



One of hundreds of components in marijuana, CBD does not cause a high by itself.

The strongest scientific evidence for CBD is for its effectiveness in treating some childhood epilepsy syndromes, such as Dravet syndrome and Lennox-Gastaut syndrome (LGS), which typically don't respond well to antiseizure medications.

## Top Medical Uses

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### 01

#### Anxiety

Studies and clinical trials are exploring the common report that CBD can reduce anxiety.

Many studies and users reporting reduced stress and anxiety, even in specific conditions like Social Anxiety Disorder (SAD) and PTSD, often by interacting with serotonin receptors and reducing activity in brain areas linked to fear.



### 02

#### Insomnia

Studies suggest that CBD may help with both falling asleep and staying asleep, in part by helping address chronic pain and anxiety.

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### 03

#### Chronic Pain

Increasingly, human studies are substantiating the claims that CBD helps control pain.

One animal study from the European Journal of Pain suggests CBD could help lower pain and inflammation due to arthritis when applied to skin. Other research identifies how CBD may inhibit inflammatory and neuropathic pain, which are difficult to treat.



### 04

#### Addiction

CBD can help lower cravings for tobacco and heroin under certain conditions, according to some research in humans.

Animal models of addiction suggest it may also help lessen cravings for other addictive substances such as alcohol, opiates, and stimulants.



# CBC

## What is CBC?

CBC (Cannabichromene) is a non-psychoactive cannabinoid in cannabis, third most abundant after THC and CBD.

Known for potentially boosting mood, relieving discomfort, and fighting inflammation by interacting with pain receptors (TRPV1, TRPA1), both of which are linked to pain perception, and enhancing other cannabinoids (like THC/CBD) through the "entourage effect."



It doesn't cause a "high" and shows promise for conditions like arthritis, depression, and neurodegenerative diseases.

Cannabichromene may be a powerful cancer fighter, and the reason might be its interaction with the body's natural endocannabinoid, anandamide. CBC also appears to inhibit the uptake of anandamide, allowing it to remain longer in the bloodstream.

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