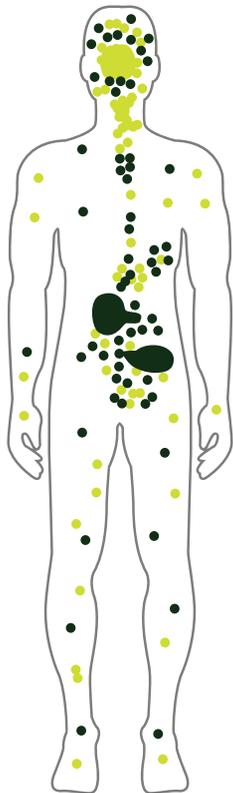


## A look at the Endocannabinoid System

The Endocannabinoid System (ECS) is a physiological system with a main function to maintain bodily homeostasis, or biological harmony in response to changes in the environment.



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## Understanding Cannabinoids



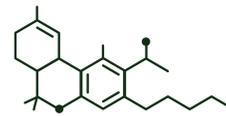
# What are Cannabinoids?

“Cannabinoids” is a general name for a class of chemical compounds that naturally occur in cannabis. They are formed in trichomes, which are the sticky glands on the outside of the plant. Some cannabinoids boost psycho-activity while others may provide medical benefits.

There are over 113 cannabinoids found in the cannabis plant. Cannabinoids (THC, CBD, CBN, CBG, CBC) work by binding to the cannabinoid receptors (CB1 and CB2) in the body.

## THC

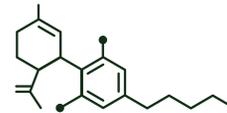
*Tetrahydrocannabinol*



THC is the main chemical compound found in the cannabis plant. When used, either through ingestion or inhalation, it binds to specific receptors in the brain called cannabinoid receptors. In low doses, the compound may; cause some pain reduction, reduce aggression, stimulate appetite, and may help reduce nausea. Higher doses may cause the “high” associated with cannabis, leading to altered perception of time and space, and feelings of happiness or fatigue.

## CBD

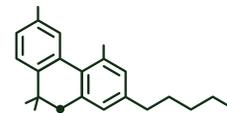
*Cannabidiol*



CBD is a non-intoxicating compound in the cannabis plant. While delta-9-tetrahydrocannabinol (THC) is the major active ingredient in cannabis, cannabidiol can be up to 40% of the plant’s extract, and can be obtained from both cannabis and hemp. CBD is most commonly used for seizure disorder (epilepsy). It is also increasingly used for anxiety, pain, dystonia, Parkinson disease, Crohn disease, and many other conditions, but scientific evidence for these uses is still too early to be definitive.

## CBN

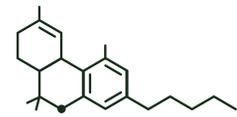
*Cannabinol*



Cannabinol (CBN) is considered a mildly psychoactive cannabinoid known for its sedative properties. When THC is oxidized, the degradation process converts THC to CBN, which may account for the sedative effect aged cannabis often carries.

## THCa

*Tetrahydrocannabinol-A*

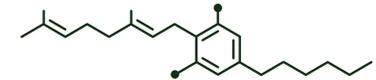


THCa is the non-activated form of THC. THCa requires heat to turn it into THC in a process called decarboxylation.

**Decarboxylation** is a chemical reaction that removes a carboxyl group and releases CO2 allowing THC to be absorbed into the body.

## CBG

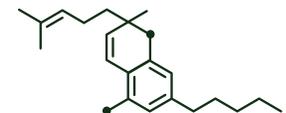
*Cannabigerol*



CBG is thought to boost anandamide, an endocannabinoid that naturally increases dopamine levels and responsible for regulating various health functions such as mood, sleep, and appetite. GABA uptake in the brain may be obstructed by CBG, making this cannabinoid a possible anti-anxiety agent and muscle relaxant.

## CBC

*Cannabichromene*



CBC is typically found in low levels in most cannabis strains and shares molecular similarity to other cannabinoids such as THC and CBD. CBC is also a descendant of CBG, which acts a chemical precursor to these three major cannabinoids. CBC may work most effectively when paired with other cannabinoids and terpenes to maximize the whole plant medicinal spectrum cannabis potentially offers.

### Sources Consulted

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