

# The Endocannabinoid System: How Cannabis Can Benefit It



New discoveries of the health benefits of cannabis continue to emerge. Recent studies have concluded that cannabis affects the endocannabinoid system in the body positively. To understand this fully, let us first understand what the endocannabinoid system is and why it is so important.

## The Endocannabinoid System

In the early 1990s, when researchers were exploring tetrahydrocannabinol (THC)—the major psychoactive component and one of the 113 cannabinoids recognized in cannabis—and its effect on the human body, the endocannabinoid system (ECS) was discovered. The ECS is a very complex cell-signaling system. It is found in every human body and is active even if you are not a cannabis user. Despite being a fairly new topic, researchers stated that the ECS is responsible for regulating a wide range of functions and processes in the body, including but not limited to:

- Sleep.
- Mood.
- Appetite.
- Memory.
- Fertility and reproduction.

## How does the Endocannabinoid system work?

To know how the ECS works, first, we need to know the structure of the ECS itself. The endocannabinoids system consists of three main components:

- Endocannabinoids
- Receptors
- Enzymes

### **Endocannabinoids component**

The endocannabinoids component, also known as "endogenous cannabinoids," consists of molecules that are manufactured naturally by the human body itself. These molecules are similar to those found in cannabinoids. However, the body produces them naturally. According to experts, two key endocannabinoids have been discovered so far:

- Anandamide (AEA)
- 2-Arachidonoylglycerol (2-AG)

These two help to keep the internal functions of the ECS running smoothly. The human body produces them as needed, but it is difficult at the current time to test each one individually and know precisely each one's level in the body.

### **Receptors**

Endocannabinoid receptors are found throughout the whole body. Endocannabinoids bind to them when the body needs to take action. According to researchers, there are two main receptors in the body:

- CB1 receptors, which are found in the central nervous system.
- CB2 receptors, which are found in the peripheral nervous system of the body--specifically the immune cells.

### **Enzymes**

These are responsible for breaking down endocannabinoids after they have carried out their functions.

According to researchers, there are two main types of enzymes responsible for endocannabinoid breakdown:

- Fatty acid amide hydrolase. They break down AEA.
- Monoacylglycerol acid lipase. They break down 2-AG.

## Why is the Endocannabinoid System important?

According to current research, The ECS has been linked to the following processes in the human body:

- Appetite.
- Metabolism.
- Chronic pain management.

- Inflammation.
- Immune system responses.
- Mood.
- Memory and the ability to learn.
- Motor control.
- Sleep.
- Cardiovascular system function.
- Muscle formation and growth.
- Bone remodeling, construction, and growth.
- Stress reaction.
- Reproductive system function.
- Nerve functions and skin.

These functions are what keep your body in a state of homeostasis, which refers to the stability of your body's internal environment. As an example, if an external force acting upon your body disrupts your body's homeostasis, like pain from an injury, the ECS will kick in to help your body deal with the situation, guiding your body to return to its ideal previous form.

## Cannabis and the interplay with the Endocannabinoid System

The cannabis plant is part of nature's pharmacy and could have medicinal application in balancing the endocannabinoid system. The plant could potentially be used to treat some chronic conditions.

### What about CBD?

CBD is one compound in the cannabis plant. CBD is a substance that is extracted from the leaves and flowers of the hemp plant. It is a substance that has been used throughout the years, however, it was not legalized until recently. CBD is used to deal with ailments like epilepsy and autoimmune diseases. CBD works by influencing the endocannabinoid system of the body.

As mentioned before, endocannabinoids are found in every organ and tissue of the human body. They are made naturally from the cells' content of Omega 3 and Omega 6 acids. CBD activates endocannabinoid receptors inside of the cells making the cell perform special tasks, like increasing cell's energy storage and reducing pro-inflammatory cytokines.

Endocannabinoids are lipids made from cells' Omega 3 and Omega 6 acids. Moreover, Omega 3 produces Omega 3-derived endocannabinoid epoxides, which are powerful substances with anti-inflammatory properties. In short, Omega 3 acids and endocannabinoids depend on each other.

Since Omega 3s and endocannabinoids depend on each other, Omega 3 deficiency has a tremendously negative effect on the body. However, many people prefer CBD oils to

Omega 3 supplements. CBD's effect appears more quickly than that of Omega 3. Omega 3 effects appear after several weeks of regular consumption, while the CBD effect appears almost immediately. That alone makes people prefer CBD oils over Omega 3 supplements. However, it is important to note that CBD is not a treatment for Omega 3 deficiency.

According to one study, 60% of U.S. citizens suffer from Omega 3 deficiency. That can help explain one reason why people crave CBD products so much, since CBD products have a near immediate effect. However, it is recommended to check your Omega 3 levels regularly and discuss them with your doctor, as people with extreme Omega 3 deficiency get bad results when consuming CBD products.

It is recommended when you search for CBD oil, look for the ones containing Omega 3 and vitamin D3 infused in them. That way you can benefit from the fast-acting CBD effects while treating the underlying Omega 3 deficiency.

## Where can I get cannabis?

If you are interested in cannabis, you may be wondering where you can get some. Evergreen Dispensary is one such place. We specialize in providing high quality cannabis in various forms at a reasonable price.