# THE ENDOCANNABINOID SYSTEM

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#### The MISSING LINK in the UNDERSTANDING of HUMAN PHYSIOLOGY

#### A. What is the ENDOCANNABINOID SYSTEM (ECS)

The **ECS** refers to a collection of millions of cell receptors and corresponding molecules found in humans and all mammals. You can think of cell receptors like little locks on the surface of your cells.

The keys to these locks are bio-chemical molecules called cannabinoids. Each time a cannabinoid binds to a cell receptor it relays a message, giving your cell a specific instruction or direction.

#### There are Two Types of Cannabinoids

- 1. **Endocannabinoids** are produced naturally within the body. However, its known that more endocannabinoids get produced if the diet contain foods called Exo cannabinoids that contain these biological Phyto (plant) Chemicals.
- 2. **Exo cannabinoids**. Exo comes from external sources. In general it is plant based, originating from all strains of the cannabis plant family both from Marijuana (Cannabis Indica) and, or Hemp (Cannabis Sativa). The preferred method of ingesting it is through the mouth and digestive tract. Hemp is the preferred source as it does not contain the psycho-active ingredient THC (Tetrahydrocannabinol) that produces the known narcotic effect and that also poses the addictive risk factor, as well as other risks like being able to trigger depression, anxiety and psychosis. The predominant active, harmless cannabinoid in the Hemp plant is Cannabidiol (CBD).

The two primary cell receptors of the ECS are Cannabinoid Receptor 1 (CB1) and Cannabinoid Receptor 2 (CB2). As important as neurotransmission (the communication between your brain and your body) is, so is the functioning of cannabinoids in your ECS to ensure vitality. The bottom line is that the central nervous system (CNS) and the ECS work together in regulating and maintaining all human physiology and that your body requires a healthy ECS to work efficiently to ensure optimum health and vitality.

What's really interesting is that scientists wouldn't have discovered the ECS if they did not do research on cannabis' narcotic effects. The discovery of the ECS can be attributed to Israeli research in the 1960's done on cannabis and how it works in the body. These studies were instrumental in the discovery of the ECS. As you can observe, there is a common denominator in these names i.e. endocannabinoid system, endocannabinoids, plant cannabinoids, as they all got their domain name from the same plant family. More interesting is the fact that these discoveries were never implemented in the curriculum of modern medicine. To this day medical professionals qualify without learning about this major bodily system.

### B. What Does the ECS Do in Human Physiology?

This amazing ECS system in your body is the master regulator, coordinator, and healer (inner doctor) of the human body.

Here are some of the main processes your ECS has been observed to regulate, even though its involvement is not limited to these:

- Neuro transmitting
- Hormones and endocrine system
- Energy Balance and Metabolism
- Social Behaviour and Anxiety
- Detoxification and Cleansing
- Cellular Communication
- Cardiovascular Function
- Reproduction and Fertility
- Temperature Regulation
- Bone Growth and Density
- Inflammation and Pain

- Pleasure and Reward
- Immune Function
- Facilitates healing
- Motor Control
- Stress Response
- Blood Sugar
- Digestion
- Memory
- Mood
- Sleep and
- Many more

### YouTube footage that Graphically Demonstrates How the ECS System Works

- 1. Visualization of the endocannabinoid signaling system https://www.youtube.com/watch?v=jznQfMj9RWM&t=184s
- 2. The Human Endocannabinoid System <a href="https://www.youtube.com/watch?v=CUEvzNBTPxc">https://www.youtube.com/watch?v=CUEvzNBTPxc</a>
- 3. Dr. Raphael Mechoulam on the endocannabinoid system <a href="https://www.youtube.com/watch?v=n3fkiwTABag">https://www.youtube.com/watch?v=n3fkiwTABag</a>
- 4. Understanding the Endocannabinoid System https://www.youtube.com/watch?v=3sEwoJv NRc

## The need for CANNABINOIDS as a daily food!

Everybody wants his/her body to function optimally and as balanced and efficient as possible. We don't want to struggle, complain, or break down while the body should be effectively doing its essential jobs every day. If all the above is considered, it is clear that the Hemp plant should be classified as the master super food and herb. It should be legal and it should arguably be classified as compulsory in our modern 'dis-eased' societies and if not taken daily one should be taxed. It is as crime against humanity that Hemp is made illegal and demonised through false propaganda. Hemp is indeed the MISSING LINK between 'DIS-EASE' and health and its leaves should be part of every meal every day.

This is just a brief overview of the endocannabinoid system and some cannabinoids. Each year, new studies shed light into what this amazing network and these accompanying nutrients do inside our bodies.