

Body Endocannabinoids and Pain Receptors

In order to understand the effects of medical marijuana in the body, you need to understand the endocannabinoid system. Endo stands for inside the body or endogenous and cannabinoids are the group of chemicals that affect the system. The endocannabinoid system is already present in your body and already being activated by naturally occurring cannabinoid molecules, whether or not you're using any marijuana. When you use marijuana, that stimulates the endocannabinoid system. Now these work similar to other drugs that you are already quite informed on. Medications like antidepressants and seizure medications all work at the neuronal level.

When one neuron is communicating with another neuron sending messages across cellular pathways in the nervous system, it sends it through a little tiny junction. There isn't exactly one nerve that extends all the way from your brain, all the way down to your fingertips so that when you burn your finger, you'd become aware of it. There's multiple nerves that communicate with each other through these little channels between each of the ends of each long nerve cell, and that way you can get information delivered a little more readily, like the electrical system in your home where there's one big electrical cord, for example, the spinal cord that divides down into multiple smaller electrical cords.

At each of these areas, you can either increase the intensity of the response or decrease the intensity of the response through these endocannabinoid receptors. The receptors are located just before the beginning of the next nerve signal, right at the end of the previous nerve signal where we would describe the presynaptic junction and they're really terrific there. They sit at that presynaptic junction and the surface and then measure the outside cell condition and make some additional recommendations in terms of how much norepinephrine or dopamine or serotonin should be delivered across that synapse to the neighboring neurons, and that helps your body to know how to respond to a painful stimulus or to a stimulus of hunger or nausea or inflammation.

By using the endocannabinoid system to further reduce inflammation or increase the inflammation, you can inhibit or reduce sore or simulate or increase the amount of any of these neurotransmitters that are flowing over that synaptic junction, and that'll help change the communication from cell to cell. This is why the endocannabinoid system is so important because by stimulating it with medical marijuana, you can affect cells all over the body. I mean the CBD1 receptors are located really everywhere that can affect areas of the body that improved nausea, decreased appetite, stimulate all kinds of feelings of feeling good and reducing seizure disorder. The CBD2 receptors are primarily exclusive to the immune system.

Now the number of receptors on different cells varies in different body organs. There's quite a concentration of CBD1 receptors in the brain. Of course, certain types of marijuana has significant effects on brain function by directly stimulating the central nervous system CBD1

receptors, but their CBD1 receptor is present all over the body. You can also get nice improvements and changes in the muscle and also of course the very interesting and exciting things happening to metabolism with a pancreatic activity associated with CBD1 receptor stimulation. CBD2 receptors are also very interesting in that they impact the body's communication with the immune system and I'm going to talk about that in an upcoming video.