



## CANNABIDIOL OIL (CBD) - THE FULL AMAZING STORY

*How does CBD provide its therapeutic benefits?* To answer that question we must first know about the Endocannabinoid System (ECS).

### **THE ENDOCANNABINOID SYSTEM (ECS)**

The ECS evolved in primitive animals over 600 million years ago. It is shared by all vertebrate species, including humans, and is essential to health and well-being. Its goal is to promote homeostasis and balance in the body as changes happen in the external environment. The ECS is responsible for balancing and controlling communication between cells. Just some of the activities it regulates are appetite, pain sensation, stress response, mood, and memory. It also serves as a bridge between body and mind through actions in our immune system, nervous system and all the body's organs.

ECS is composed of:

- 1. Endocannabinoids** (Endo = inner) - naturally synthesized in the bodies of all vertebrates.
- 2. Receptors** - found everywhere throughout the body and believed to be the most numerous of our receptors (these receptors were identified by scientists in 1988 followed in 1992 by the further discovery of the ECS).
- 3. Enzymes** - stimulate the system to either raise or lower the production of Endocannabinoids.

### **The ECS and Phyto Cannabinoids**

Cannabinoids produced in Cannabis plants are referred to as Phyto (from plants) Cannabinoids. Because the chemical make-up of these Phyto Cannabinoids so closely resembles the structure of our own Endocannabinoids, they are recognized by and able to attach to our Cannabinoid receptors, making their therapeutic properties bioavailable to our bodies.

Supplementation of Cannabinoids via CBD can be especially important for individuals producing a lower amount of Endo Cannabinoids than is considered essential to health and well-being -- the result being many important bodily functions are thrown out of balance. Scientists believe this may be a cause factor in many conditions such as Fibromyalgia, Anorexia, Depression, IBS, MS, Migraines, PTSD, Parkinson's and Autism.

### **Cannabis**

Cannabis is a Genus of the family of plants that evolved over 32 million years ago. It has been revered and safely utilized for medical purposes by indigenous healers in ancient India, China and Tibet for over 5000 years. It was introduced into Western medicine in 1839 by a surgeon who learned of its healing abilities in India.

There are over 85 Phyto Cannabinoids in the Cannabis plant. The two primary Phyto Cannabinoids possessing therapeutic properties are Cannabidiol (CBD) and THC. While other plants such as Black Pepper, Rosemary, Echinacea and Cacao also produce Phyto Cannabinoids, only Cannabis contains CBD.

Two varieties of Cannabis, Hemp and Marijuana, both contain these Phyto Cannabinoids including CBD and THC, but they differ greatly in their physical distinctions and in their uses.

- 1. Hemp** (classified as “Sativa” and referred to as “Industrial Hemp”) - used for millennia to produce such things as paper, fabric and clothing, construction materials, auto parts, food and drink and body care products. The parts of the plant utilized are its stalks, stems and seeds. It contains THC at the legal level of .3%. Because of its low THC content, it has been legal to grow for many years for industrial purposes and is now legal to grow for medical purposes in many states.
- 2. Marijuana** (classified as “Indica”) - contains more significant amounts of both CBD and THC -- 50-60% as compared to the .3 % in Sativa. The parts of the plant utilized are its leaves and flowers. While Indica also has medical and therapeutic benefits to offer, it has been used chiefly for recreational purposes and is still illegal to grow, produce and possess. Now, many states, in response to scientific findings and demands from their citizens, have legalized the production and distribution of medical marijuana.

In the last 20 years, over 35,000 scientific journal articles have been published outlining research findings that support the belief that the Cannabis plant is an invaluable healing agent, yet medical professionals and researchers in the U.S. have only recently begun to accept the use of CBD Oil, produced from both varieties of the plant, as a therapeutic healing substance.

### **Extraction Methods**

Most companies are using the CO2 Supercritical Extraction method, which is the most favored, even though the equipment is expensive. It's safe, CO2 being a common food additive; it's effective, and the end product is pure.

Other methods include Olive Oil, Dry Ice and Solvent extraction. Each has its downside producing either low yields or low quality end product.

***TARA's CBD Oil is extracted using a propriety, super critical CO2 extraction method. No solvents are used in the processing.***

### **Full Spectrum vs. Isolated CBD**

It's not yet scientifically proven, but many believe that all of the compounds contained in the cannabis plant -- CBD, terpenes and other cannabinoids such as CBG, CBN and THC in ratios that occur naturally in the plant -- work together synergistically to provide more benefits and insure better absorption than an isolated form of just CBD Oil. This is referred to as the “Entourage Effect.” Other studies have shown no difference in effectiveness between a full spectrum product and an isolate. So the jury is still out on this issue.

***TARA CBD products use full spectrum compounds from organically grown plants.***

### **CBD Oil Products**

In addition to oils and lotions for topical applications, CBD Oil can be found in many other forms including tinctures and extracts that can be added to food or drink, capsules, suppositories, sprays, transdermal patches, soaps and skin and body care.

### **Benefits of CBD**

CBD Oil has now become available to those seeking safe, natural and inexpensive treatments that promote self-healing and restore balance, without the many negative side effects of prescription drugs.

A most noteworthy benefit is that CBD is effective in treating a wide variety of conditions, as opposed to taking a multitude of prescription medications, each treating an isolated illness with

unknown synergistic effects on the body.

In general, the Phyto Cannabinoids CBD and THC improve the functioning of the whole Endocannabinoid System. You don't have to be suffering from a major injury or illness to realize the benefits of CBD Oil. Below are some of the major conditions that may see positive relief from CBD Oil supplementation.

- 1. Chronic Pain and Injury** - CBD has been shown to offer relief from chronic pain without the adverse side effects of using opioids -- and it is non-addictive. It also offers treatment benefits for injuries by minimizing pain and damage caused by an injury, by stabilizing the nerve cells and by calming and dampening the release of pro-inflammatory substances from nearby immune cells.
- 2. Cancer** - Boosting the functioning of the ECS with CBD supplementation could prove lifesaving for cancer patients. The ECS plays a major role in a process called "autophagy" which keeps normal cells alive while having a deadly effect on malignant tumor cells. Both the American Cancer Society and the National Cancer Institute recognize CBD's potential in slowing and reducing the spread of cancer cells.

CBD's anti-inflammatory properties have proven useful in treating inflammatory skin conditions such as acne, psoriasis and eczema as well as rheumatoid arthritis. It can help fight bacterial infections and reduce nausea. It's also been proven useful in treating stress, anxiety and depression. Its anti-spasmodic properties are effective in the treatment of epilepsy and seizures. It also offers support for the Immune system and helps reduce insomnia and promote healthy sleep.

## **NOT ALL CBD IS CREATED EQUAL**

As is true with most products, there can be great variance in the quality of CBD Oil that is being produced as a result of many factors: plant strain and purity, cultivation/farming practices, over processing, questionable concentration levels and lack of regulation.

Most of the CBD being offered today in a multitude of new products contains Hemp/CBD Extract produced from Industrial Hemp. Because of their low THC content, these products are legal and can be sold and distributed throughout all 50 states. Hemp/CBD Extract offers numerous therapeutic benefits and has no mind-altering effects on the body.

Of concern, however, is that in addition to the above mentioned factors, Hemp is a bio-accumulator -- it draws substances from the earth such as metal, pesticides, solvents and microbials. CBD Oil with a high metal content is then over processed, thereby lowering concentration levels and weakening its effectiveness.

TARA's CBD Oil, however, is produced from a unique strain of hemp that does not act as a bio-accumulator. Even so, after the Oil is extracted, it is lab tested to confirm the absence of any of these substances. Processing is thus minimized, insuring the quality, high concentration, and full effectiveness of the CBD Oil.

### **Topical Application of TARA CBD Products**

When **TARA CBD Massage Oil** is applied or massaged onto the body, CBD is absorbed through the skin, attaching to nearby Cannabinoid receptors just under the skin's surface. CBD's benefits can then be utilized by the body wherever needed, including the improved functioning of the ECS System.

Our convenient **TARA CBD Pain Relief Roll-On** can be a constant companion, providing immediate localized pain relief when on the go.

## **Information Sources**

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