



# HempNesic<sup>®</sup>

PAIN-RELIEVING GEL

HempNesic<sup>®</sup> is uniquely and specifically formulated to provide pain reduction for acute and chronic pain, primarily musculoskeletal.

## HempNesic<sup>®</sup>

PAIN-RELIEVING GEL

is the only FDA registered topical pain-relieving gel that directly influences the endocannabinoid system with Hemp-derived cannabidiol containing Capsaicin, Menthol and Camphor. Numerous studies have demonstrated that mammalian tissue contains at least two cannabinoid (CB) receptors, CB1 and CB2. CB1 receptors are shown to mediate analgesia in animal studies. Human studies are ongoing and preliminary data clearly shows that pain is reduced using hemp-based cannabidiol when taken orally or when applied topically.

### PRODUCT BENEFITS

- Goes on cool and progressively heats up
- Infused with Capsaicin, Hemp Oil, Ilex, and Green Tea
- Paraben-free formulation
- Light, oil-free formula absorbs into the skin rapidly
- Longer lasting formula. One application offers relief for up to 4-6 hours
- Provides fast relief from sore muscles

THE ONLY PRODUCT CONTAINING **CBD** WITH AN NDC#

MONEY-BACK **100%** GUARANTEE



3oz Tube

Fungal Care • Skin Care  
Wound Care • Pain Management



# CBD

## THE ENDOCANNABINOID SYSTEM AND PODIATRY

BY ROBERT BLAINE, DPM, FACFS, QME

Seven years ago, I was approached by a potential physician-client asking me to incorporate CBD into a topical gel intended for pain management. I remember asking, "What is CBD?" At that time, I had never had a conversation regarding CBD or the endocannabinoid system with any docs or any patients. How times have changed! Now I have a conversation with patients and docs daily—and they bring up the topic!

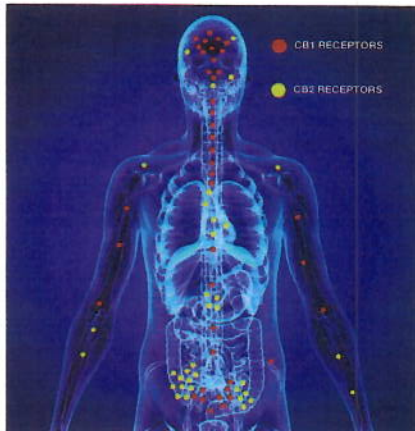


Figure 1: CB1 and CB2 receptors throughout the body.

### What is CBD?

CBD, scientifically known as *cannabidiol*, is one of over 500 molecules found in marijuana and hemp. It has no psychogenic effects, and presents minimal to no side effects as reported by scientific and medical literature, even at high doses. Another molecule of marijuana, THC, scientifically known as *tetrahydrocannabinol*, presents numerous documented side effects including well-known psychogenic effects.

Both hemp and marijuana belong to the Cannabis Sativa plant species. They differ in appearance and have different scientific properties. Physically, hemp is a taller, skinnier plant with narrow leaves primarily at the top of the plant. Marijuana is of a shorter, more bush-like stature with dense buds and broad leaves. THC is heavily present in marijuana while CBD is minimal; hemp has virtually no THC with an abundance of CBD. Because of its THC content, marijuana is primarily grown for its psychoactive properties. Hemp is grown for a variety of THC-free products like paper, clothing, biofuels, food products, and oils. We now understand that hemp can be grown to extract CBD.

### The Endocannabinoid System

Thirty years ago, when I was in podiatric medical school, there was no instruction regarding the endocannabinoid system. Today, roughly one of seven general medical schools add the endocannabinoid system to the curriculum, typically part of one lecture. The endocannabinoid system was initially described by Raphael Mechoulam after he discovered *anandamide*, a naturally occurring endogenous cannabinoid (endocannabinoid). The human body produces its own cannabinoids and cannabinoid receptors. The receptors have been discovered in the central nervous system in humans as early as intrauterine fetuses at 5 months! And more recently, studies confirm cannabinoids in human breast milk.

The endocannabinoid system is comprised of cannabinoid receptors called CB1 and CB2, endocannabinoid molecules (like anandamide), and their metabolic proteins. It primarily functions to support and maintain homeostasis in the body. CB1 receptors are located throughout the body in the central nervous system and primarily the brain. CB2 receptors are also located throughout the body with a heavy concentration found in peripheral organs associated with our immune system (Figure 1). 95% of CB1 and CB2 neural receptors are GABAergic, meaning CBD cannabidiol acts on receptors that use GABA ( $\gamma$ -aminobutyric acid; 4-aminobutyric acid) as the neurotransmitter. GABA receptors are associated with transmission of pain.

### Personal Experience

Let me preface these clinical observations and my own experiences. Like you, I essentially doubt anything I am told about efficacy of anything in treating painful conditions—especially any product claiming relief of pain when applied topically. My "clinical trials" include me simply handing patients a blank tube of gel (Orthonestic with 25 milligrams of cannabidiol) and asking that they try it on the area in pain. I hand the patient a tube and leave the treatment room for about ten minutes while seeing other patients. Every single patient—without exception—experienced immediate pain relief.

This observation extends to neuroma pain, myotendinous calf pain, OCL talus ankle pain, bunion pain, and trauma closed wounds. I even gave some of my orthopedist co-workers the non-opioid CBD gel and they also eradicated their patient's painful pathologies.



*Hempnesic by Blaine Labs brings the powerful effects of CBD combined with the therapeutic properties of Menthol, Camphor and Capsaicin.*

As physicians prescribing medication, we are warned of the danger of opioids and daily overdoses reported nationwide. But we are not being told about non-addictive and safe alternatives. My personal experiences with administering CBD both topically and sublingually have allowed me to manage pain and minimize patient use of opiates. When I do write for an opioid, I have had great success with 2.5 mg of oxycodone taken with 25mg of sublingual CBD. Pain is relieved while the risk of addiction is drastically diminished. By using safe, effective, and naturally occurring opioid alternatives, we can save patients from pain and addiction.

Dr. Robert Blaine is the founder and CEO of Blaine Labs, Inc. a pharmaceutical research, development, manufacturing, and distribution company. Dr. Blaine began his career as a podiatric surgeon specializing in lower extremity trauma, and has over thirty years of medicine and surgical experience. He served as the Podiatric Surgical Residency Director at Bellwood General Hospital for eight years. Dr. Blaine holds a podiatric medical degree from the California College of Podiatric Medicine, and a Bachelor of Science in Biology and Chemistry from California State University. He completed graduate work in Biochemistry at University of California.



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