

Not All CBD Products Are Alike

“Biotics wants to make sure that you and your patient are getting exactly what you are paying for.”

The CBD world is like the Wild West. In 2016 the FDA evaluated label claims and found 91% of products tested did not meet label claims. The next year in 2017 a study in JAMA showed 74% of products did not meet label claim. And yet CBD products are sold in hardware stores, beauty salons, gas stations and just about any retail outlet you can imagine in products ranging from mascara to candles. Why is CBD such a boom product? The reason is that there is so much data about cannabinoids and how they affect our health.

Over the past few decades the existence of the endocannabinoid system (ECS) was discovered and identified as the orchestrator of homeostasis. To date there are literally thousands of peer reviewed published studies revealing and explaining the functional roles of the ECS. Our bodies make endocannabinoids and we have endocannabinoid receptors in every organ. Endocannabinoids are responsible for maintaining homeostasis for bodily functions like breathing, mood, sleep wake cycles, fertility and



reproduction, hormonal balance, immune response, tumor surveillance and inflammation to name a few. The discoverer of the endocannabinoid system, Dr. Raphael Mechoulam, a scientist from Israel, said it was impossible to list all the physiological functions of the endocannabinoid system because there are too many. Our bodies make cannabinoids, but phytocannabinoids come from plants and interact with our endocannabinoid system.

CBD and THC are two of the most well-known cannabinoids and are found in cannabis plants. Most people are not aware that

there are hundreds of cannabinoids. Under the cannabis family two plants stand out. One of them is hemp, which has less than .3% THC, the psycho-active part of the plant that gets you high.

Hemp contains higher levels of the cannabinoid CBD since it has lower levels of THC. The other plant is called marijuana and contains higher levels of THC and lower levels of CBD. Both plants have therapeutic potential; CBD has more therapeutic value without the risk that THC contains. Take a look at this chart that shows a few of the major cannabinoids from hemp oil. The

top part of the circle is CBD, the major player; but CBDV, THCA, CBDA, CBC, CBG, THCV are also present. I mentioned earlier that CBD is one of hundreds of cannabinoids and terpenes. Think of CBD as one note in a symphony. The other cofactors and cannabinoids represent the rest of the music. The synergistic effect of using the full spectrum of cannabinoids cannot be overstated. You may want to print out this chart to show it to your patients to explain the power of using all the cannabinoids as they occur in plants.

By the way there is a big difference in hemp oil that comes from the seeds, leaves and stems and hemp oil that comes from the flower. Traditional hemp seed oil has an omega 6:3 ratio of around 3:1 and contains anywhere from 2-4% GLA. It's a nice alternative oil that has a nutty flavor and can be used in salads, etc. But if you are looking for therapeutic effect, most of the research has been done on the cannabinoids located in the flower where the largest concentration of CBD is located. Knowing this Biotics has partnered with the largest and most sophisticated hemp grower in the world, Ananda Professional. From hemp seed genetics to the manufacturing of the final product, they closely monitor every step in the process, guaranteeing the purest of hemp extract products. They own the largest hemp genetic seed bank in the world responsible for the growth, development, and harvesting of hemp. They were the first U.S. farm granted a license by the DEA to grow hemp. They are a registered FDA approved facility. But the part of the company that I like the most is the purity of the product.

If you send the IPC code to their website and then enter in the specific lot number of the product in your hand, you can see a complete analysis furnished by third party certification. Yes, they test for the full spectrum of cannabinoids but also test for toxic environmental chemicals to prove that they are not present. Things like glyphosate and other herbicides, pesticides and heavy metals.

But Biotics takes it a step further. When Biotics receives a new lot number they do their own due dili-

gence to check for metals, bacteria, biological activity, etc. Then in an effort to protect the recommending physician even further, they send it out to get their own third party Certificate of Analysis. This triple safety analysis may not be necessary. But Biotics wants to make sure that you and your patient are getting exactly what you are paying for. And as we have said many times... it's "What is NOT on the label" that can cause trouble.

The highest concentration of CBD is in the hemp flower. Biotics has released three products that come from a full spectrum hemp flower extract. The first product, FS-15 Hemp, is an encapsulated soft gel hemp oil. Each gel cap has 19 mg of a hemp flower extract containing 15 mg of CBD.

The second is a hemp flower extract oil to be used under the tongue, named FS-20 Hemp Extract tincture. A dropperful has 26 mg of a hemp flower extract which contains 20 mg of CBD oil.

The third product is a roll-on called "Hemp Infused Relief Roll-On". A warming and cooling liquid balm that not only contains full spectrum cannabinoids, but also other skin-healthy ingredients such as willow bark extract, coconut oil, shea butter, arnica, camphor and lavender. It can be used multiple times a day as needed.

As you can see this is a huge topic and we will come back to some of the research another time. The studies are very powerful and they don't even use some of the gut healing anti-inflammatory strategies that we employ daily. Adding whole hemp extract to the therapies you are already employing will add another level of relief.

As I opened our discussion, it may be the Wild West in the CBD world, but you now have a consistent triple assayed product that has measurable amounts of natural cannabinoids.

Thanks for reading this week's Tuesday Minute. I look forward to being with you again next Tuesday.