



# How Athletes are Performing Better and Recovering Faster



The Ultimate CBD Report



Either you have tried CBD, a friend or family told you about CBD, or you have seen it on social media. Unless you live on the moon, you have probably come across CBD. It is advertised as the “cure-all” miracle supplement of today. Consumers are excited to say the least.

Is all the anecdotal evidence snowballing out of control because of the mob mentality? Are the pro athletes that back it just paid endorsements, or is it legit? If so, how and what products should you try?

If you have tried CBD and you are now a raving fan because it works so well, this will explain why your product is working. If you're a sceptic and on the fence about even trying CBD, read on - this report will tell you what to look for in a quality product with high efficacy and how to use it!

## CBD

*First things first - Many individuals seem to be incorrectly labeling the entire hemp industry as “CBD.” CBD is just ONE of over a hundred discovered cannabinoids! A cannabinoid can be defined as “one of a class of diverse chemical compounds that acts on cannabinoid receptors, also known as the endocannabinoid system (ECS). Don't worry; we'll put that into laymen's terms shortly.*

Ironically, supplementing with one of humankind's oldest medicines (hemp use dates back THOUSANDS of years!) is now considered cutting edge. Now, it's not just crazy Uncle Joe supplementing with cannabinoids. Anecdotal testimonials are flooding the web and people are turning to ECS research to figure out if CBD is, in fact, nature's miracle supplement.

CBD is so effective, the government patented nonpsychoactive cannabinoids almost twenty years ago (**Patent 6,630,507**) as antioxidants and neuroprotectant. However, you still won't find the body's endocannabinoid system in your high school biology book. For your sake, we have taken off our tin foil caps and will just say, that for some reason, the endocannabinoid system (ECS) spent decades locked in the closet behind miles of red tape and forests of stigmas.



# The Endocannabinoid System

Don't worry this will be direct and to the point. If your thirst for ECS knowledge has not been quenched by this brief explanation, feel free to brew a pot of coffee and Wiki into the wee hours.

The endocannabinoid system is a giant neuroreceptor system found not only in humans but also in animals, even fish! This is a very old piece of biology. In the early 1990's, chemists in Israel studying cannabis (hence why "canna" is in all the technical, biological terms) discovered the endocannabinoid system.

What exactly was discovered? The ECS (endocannabinoid system) is made up of three parts:

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| 1. Endocannabinoids (or cannabinoids that your body makes endogenously, inside the body). | 2. Cannabinoid receptors most commonly referred to are the CB1 and CB2 receptors however there are more. | 3. Metabolic enzymes that break down endocannabinoids. |
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That folks, is the ECS in a nutshell.

Researchers are finding that the ECS may be one of the most widespread biological systems in the human body. The ECS is responsible for homeostasis, aka balance. Indications are showing that the ECS helps keep the body healthy in almost every biological system. The results of clinical ECS deficiency could result in migraines, fibromyalgia, irritable bowel syndrome, auto immune issues, and even neurodegenerative diseases such as Alzheimer's and Parkinson's.



## CBD and The Active Individual

Anecdotal testimonials indicate that CBD has helped clear up some pretty nasty health issues (including certain types of cancer), but, why would the active, healthy Jane or Joe benefit from taking CBD like multivitamins? Remember that tidbit about the ECS overseeing balance in the body, especially the nervous system? **This is why everyone can benefit from supplementing with cannabinoids!** People have been conscious of the need to regulate the nervous system for thousands of years. Now there is an external supplement that can help.

**The Autonomic Nervous System** - It is healthy (for a very small percentage of time) to get "pumped up" and get yourself into a state of fight or flight. When this happens, your autonomic nervous system switches into the sympathetic nervous system. That is the kick-butt work out your coach put you through that left you making sweat angles in chalk dust or a presentation you had to give to investors to grow the business. You've pushed yourself past your level of comfort. Good stuff! Now, get your body back into the parasympathetic nervous system, or rest and digest.

Imagine that you have a reservoir of power. The reservoir is a healthy, properly rested body firing on all cylinders. Think of fight or flight as "superhero mode" tapping into that reservoir. Your superhero can do amazing things like deadlift a few thousand pounds of car off a loved one! The superhero can also do more ordinary things such as working out like crazy or making yourself do something you're not normally comfortable doing.

“Superhero mode” requires your brain to release different hormones to direct your body to action. Now imagine this - for superhero to come out and kick the proper amount of butt, it draws from the reservoir of energy. This drains the reservoir. Now your superhero can no longer kick butt because it’s resources (your body) are depleted. In other words, your superhero cannibalized your body.

Some people like being a superhero, so we trick superhero into coming out by working out like crazy and pounding excess caffeine and other stimulants. However, some people are unaware that their sympathetic nervous system has taken over and are unconsciously or uncontrollably draining their bodies resources. For example, things like getting chewed out by your boss, fighting with family, raging about politics, even reliving old emotional traumas. Or, if you don't have enough of your own emotional traumas, you can download a movie and tap into someone else's trauma (Netflix and don't chill).



No matter how you ended up in there, if a person spends too much time in the sympathetic nervous system, the body will ultimately fail. Cannabinoids are one way help people transition back into the parasympathetic nervous system or rest and digest. The more time spent in rest and digest the larger your reservoir of energy for the superhero.



This is why professional athletes value and understand rest so much; they need a large superhero reservoir. In fact, a lot of athletes looking for a competitive edge will wear a heart rate variability (HRV) monitor. This monitor tells them when their body's nervous system has recovered by monitoring variations in their heart rate. The monitor tells them when they have spent enough time in the parasympathetic nervous system and gives them the green light to train again.

Humans were only meant to use the sympathetic nervous system in times when they were faced with death, either running from it or fighting to avoid it. At some point in human existence that may have been monthly, weekly, or even daily, but it was never meant to be constantly sustained. Being cognitive about the state of your autonomic nervous system will save you from a slew of health problems, not to mention improve your performance athletically, intellectually, and emotionally.

# Breaking It Down

**Sleep and Nervous System** - Even in sleep people can transition into the sympathetic nervous system. When an individual goes to sleep, they begin two short cycles called non-REM 1 and 2, then they get to NREM 3 or deep sleep. This is rest and digest and a time when human growth hormone is released. Umm, yes please!

Then they transfer to rapid eye movement or REM. This is also known as the dreaming stage of sleep. Researchers think that rapid eye movement is a time to imprint memories on the brain. During rapid eye movement brain waves act like we are in a state of wakefulness. Therefore, it is possible that your brain is switching the sympathetic nervous system. A few sleep disorders that take a toll on the nervous system are: recurring nightmares, sleep apnea, and restless leg syndrome. These disorders not only keep you from getting the proper amount of deep sleep, but also keep you in the sympathetic nervous system.

**Maintaining the Autonomic Nervous System** – Cannabinoids are a great supplement to help the body's nervous system get back to homeostasis and a parasympathetic state. There are many other ways that can be done in conjunction with CBD supplementation. Meditation, exercising and recovering properly, sleeping at least seven hours per night, and eating a healthy diet are all ways to help the nervous system. A book could be written on this section alone. Being aware of your nervous system is of the utmost importance to your overall well being.

**CBD For Working Out** - Cannabinoids are a great post-workout supplement for the autonomic nervous system, helping the body get back into the parasympathetic, or rest and digest. Surprisingly, pre-workout cannabinoids can make a huge difference! Read on...

Steady state cardio can be done in the parasympathetic nervous system. This keeps the body relaxed and loose. Furthermore, the endocannabinoid anandamide is also one of the key chemical components of "runners high." THC gets you high by mimicking this endocannabinoid and binding to CB1 receptors telling the brain to feel massive amounts of euphoria. CBD on the other hand, protects anandamide from being metabolized. Therefore, CBD is a great pre-workout to maintain your happy =)

We have worked with many athletes who supplement with CBD to help maintain focus and mental clarity--a state of calm. We have all had the experience of watching a professional athlete in the zone; it is effortless domination. Using CBD supplementation has had anecdotal effects of helping athletes achieve a more in-the-zone state during workouts and events.

And then there's recovery...Every athlete must remember that there are three facets to recovery: metabolic, muscular and nervous system. Those three aspects make up a large part of performance as well, but they are the pillars of recovery and of equal importance. CBD can help all three of these pillars based on HOW it is used.



# How to Take CBD

“Okay, okay. I see the importance of supplementing with CBD. Give me the strongest stuff you got and let’s get cracking!”

If one milligram is healthy - one hundred’s gotta be great...right? Not so much. Let’s talk about biphasic dosing.

The most famous example of biphasic dosing is alcohol. We have all seen this action. Phase one of alcohol is stimulation and mood enhancing. After a level of consumption has been reached, phase two kicks in. Alcohol in phase two is a sedative and depressant. Most of us have witnessed the broad spectrum in severity of these two phases of alcohol consumption.

What does this have to do with CBD?... A lot!

While taking excessive amounts of cannabinoids may not be as extreme as alcohol, it is important to understand what happens to the bioavailability of cannabinoids when taken in excess. First, like alcohol, everyone has a different tolerance known as “endocannabinoid tone.” Your endocannabinoid tone refers to the level of active endocannabinoid receptors, endocannabinoids, and enzymes that metabolize cannabinoids.

Interestingly cannabinoid receptors increase when the body encounters certain health issues. Therefore, a 300-pound man who is an athlete in great health may use a smaller dose than a 130-pound man with health issues.

Phase One: For most healthy adults, getting approximately 2-5 milligrams of nonpsychoactive cannabinoids systemically (into the bloodstream) twice per day will help with mental clarity, bring anxiety down, immensely aid in recovery, and help concentration. Notice we said, “systemically,” so keep dosing method in mind (and read the next section).



Phase two: If you take too many cannabinoids your body will shut off the cannabinoid receptors and induce enzymes into the bloodstream to get rid of the excess cannabinoids. While a smaller serving of cannabinoids is great for focus, too many will make you lethargic and tired.

If you are supplementing with cannabinoids for a certain ailment and not getting the desired results (and you’re certain you have a good product), try using less, probably a lot less, and build up from there. Use a good full spectrum extract and keep dosing method in mind.

It is vastly important to listen to your body and discover your own endocannabinoid tone!

# Dosing Methods

**Capsules and Edibles** - Taking hemp extraction in pill or edible form has a very low absorption rate as hemp extraction is hydrophobic (water-hating). Most of the human body is water so trying to get oil to absorb is difficult, like mixing a salad dressing of oil and vinegar. Most of the capsule (90% to 94%) passes through your body and is excreted in urine. It is also important, and often neglected, to have fat soluble foods in your stomach before consuming edibles or taking the capsules.

New technology has made some extractions water soluble, yielding a better absorption rate. However, you always want to buy a product with as many cannabinoids as possible, and a lot of water-soluble products are CBD isolates. So do some research if you go the route of oral consumption.

**Sublingual/Tinctures** - Sublingual products have a better absorption rate, about 40% depending on how long the product is held under the tongue. Tinctures should be held under the tongue for the best absorption rate, however, some companies tout the ability to put them in foods and drinks. Remember, once they go into the first pass metabolism the absorption rate drastically decreases.

That said, the neat thing about having both sublingual and first pass metabolism effects is the difference on time release. Sublingual is quicker and later you will get the absorption from the first pass. Double whammy.

**Transdermal** - Transdermal has the best absorption rate, depending on the excipient (vehicle or carrier) that takes the product through the dermis into the bloodstream. For example, Arcanum Sports Performance's transdermal gel pen, The Quill, has a 90% absorption rate in as little as five minutes. A quick 90% absorption rate takes the guesswork out of dosing. This is a great option for athletes who want control of their dose. It is also a great option for people who are trying to find a good dose for themselves by biohacking, or experimenting, to find their endocannabinoid tone.

Another transdermal application comes in the form of patches and tapes. Producers use transdermal excipients in adhesives to deliver systemic relief. Patches are touted for their discretion, while tape is touted for its ability to have both localized and systemic relief. If produced well, these methods also incorporate a time-release element that is a good option for providing extended relief.

**Topicals** - Topicals (without the transdermal excipient) hardly go systemic. However, topical CBD salves and creams that have a lot of fat-soluble carriers (like arnica oil, mango butter, vitamin E oil) will penetrate deep enough to calm overactive pain receptors in localized areas. For muscle pain and inflammation, this is a good option. Look for a product that has other ingredients that will aid in recovery and soreness (like arnica, menthol and/or organic essential oils, to name a few).

Topicals for skin issues are becoming more and more popular. CBD is great for people with skin issues like eczema, psoriasis, and acne. Cannabinoids also work with inflammation in the skin and help with the negative effects of aging. In small areas where fat soluble carriers might not be a good option, like acne, try using a sublingual or tincture on the area to reduce redness and inflammation.

The copy I'm about to give goes after each dosing method. Here's the copy you can plug and play with: If you want to get the best (dose method) check out our (product name [[hyper-link product](#)]). The (product name) will help you get (#1 benefit of it).

# CBD Products

Not all CBD products are created equal. This market is screaming for some sort of regulation, or at least a gold standard. Consumers are having trouble deciphering labels on many products. There are now thousands of companies selling CBD and a lot of them are different. Let's take a moment to review and explain some of the different types of CBD products common to the hemp industry.

**CBD** - CBD stands for cannabidiol. It is one of the most prevalent cannabinoids in the hemp plant.

**CBD Isolates** - These products contain CBD isolated out. There are no other cannabinoids found in these products. CBD isolate products are easier to make and there are usually no trace amounts of THCs. This adds up to a less expensive product for producers and consumers. However, CBD isolates are not very effective. There are many amazing compounds in the hemp plant and approximately 115 cannabinoids (with more are being discovered). A good hemp strain will have around 80 different cannabinoids. All these cannabinoids working together synergistically is where the magic happens. Many people argue that products made with CBD isolate are lackluster in the magic department.

**Full Spectrum** – Full spectrum simply means that the producer does a whole plant extract. This is where the magic happens! All the plant compounds work together as nature intended (think whole orange vs vitamin C tablet). This is commonly known as “the way to go,” in the industry, however, it can have some down sides if you are not buying from a trusted company. If it's not grown under organic methods, hemp can be dirty and contain chemicals and pesticides. Ever heard someone say CBD gave them a headache? There is a high probability that the product wasn't grown using organic methods.. Hemp is a bio-accumulator, meaning it will suck up toxins and pesticides. When buying a good full spectrum extract, also make sure milligrams of **CBD** are on the label, not milligrams of **hemp extract**. Concentration of CBD in hemp extraction can vary from batch to batch, making it virtually impossible to find a consistent dose. Full spectrum extracts can also have trace amounts of THC in them, in fact up to .3%. Bottom line, trust your company!

**Broad Spectrum** – Some producers molecularly cut out the THC from full spectrum extracts. This is nifty - think full spectrum but without any THC- but it can be expensive. We believe the industry will become more efficient at producing broad spectrum and you will see many companies make the move. There are some current negatives here as well. A lot of producers dealing in broad spectrum take a CBD isolate, throw in a few other cannabinoids and call it full spectrum without THC. It is not! When dealing with broad spectrum it is very hard to decipher the good products from the bad.



## In Conclusion

I hope this report helped clarify how to dose CBD products, what kind of products there are, and what they actually do. Cannabinoid supplementation looks promising, whether you are interested in cannabinoids because you're looking for an athletic edge, or like many of us, you just want to be as healthy as possible. Good CBD products help bring balance to the endocannabinoid system (ECS). Researchers are finding that a healthy ECS is paramount for the overall health of the body. There are a lot of great uses for cannabinoids; however, there is still a lot of research that needs to be done. Try some products to help you on your journey to the healthiest version of yourself possible! And as always...

Stay Healthy My Friends!

Tyler Mintz  
Co-Founder of Arcanum Edge

P.S. Thank you for downloading and reading How Athletes Are Performing Better And Recovering Faster. And as a thank you gift, here's a 25% off our #1 best selling patented CBD gel pen. The Quill delivers relief in as little as 5 minutes.

Use promo code: Quill25 to get 25% of

