

The compounds that have attracted the most attention from the medical field are known as cannabinoids. Cannabinoids have been proven effective and are now used in treatment of a large and growing list of illnesses and symptoms, ranging from pain to anxiety and inflammation to epilepsy, dementia and cancer. One of the conditions CBD has been proved most effective is in the treatment of sleep disturbances one of modern life's most common ills.

Who hasn't known the effects of insomnia, night-waking and an inability to fall back to sleep or restless, fitful sleep? Between our ever-present screens, combined duties outside and inside the home and the stresses brought on by modern day existence, our quality of sleep has degenerated over the decades. 70 million people in the US alone have sought medical help for sleep issues. Prescription drugs are habit-forming, become ineffective with long-term use and lead to groggy mornings. CBD has been proven effective study after study in relieving sleep disturbances.

Cannabidiol is an interesting substance, as it is biphasic, which means that it offers entirely different effects at low and high dosages. In smaller doses, it encourages wakefulness and reduces daytime fatigue, augmenting daytime performance, increasing energy and productivity. Taken at night in higher doses, it has the opposite effect, inciting and facilitating sleep and promoting sounder deep sleep throughout the night when taken a few hours before bedtime.

CBD's effects upon sleep/wake cycle are two-fold and vary enormously from individual to individual: promoting alertness, it activates receptors that are traditionally stimulated by caffeine. So how will CBD help us attain restful sleep and healthy sleeping patterns? As it happens, our sleep/wake cycles are fully dependent upon our alertness during the day. If you are typically drowsy, exhausted and suffering a lack of performance during the afternoon, this will wreak havoc upon your nocturnal sleep pattern, making it very difficult to enter the restorative non-REM sleep you require each night to feel good during the day.

The research on cannabis and sleep is only in its first chapter of what appears to be a long novel and has provided fascinating results. At the root of many sleep disorders exists an underlying cause like anxiety, stress, PTSD or chronic pain. CBD has been proven effective in relieving all of these disorders, thereby affecting the quality of sleep that is the base of many sleep disturbances.

- CBD relieves anxiety that makes achieving sleep difficult: Many sufferers of sleep disorders will say that sleep is not the issue. It is simply the symptom of a larger health issue. And one of those major issues is anxiety: how familiar an experience is lying in the dark with our minds racing, unable to turn them off? The day's past events running through your mind, stress about what tomorrow will bring and with it the anxiety that comes along with it.

Scientific findings suggest that CBD is a powerful anti-anxiolytic on both animal and human test subjects, reducing situation-induced stress in several studies.

By relieving stress and anxiety that are the root cause of your sleepless nights, CBD promotes an easier entry into the first stages of sleep. Proven by a large selection of blood tests, CBD oil also affects our dopamine levels, leading to a more relaxed and deeper sleep.

- Cannabidoil relieves night-waking and inability to fall back asleep, guaranteeing a solid night of rest: Each and every one of our brains produces endocannabinoids naturally, even if we have never consumed cannabis in our lives.

CBD is a phytocannabidoil and the fact that it occurs in nature as well as our brains should serve as an example of how primordial it is to human wellbeing. By interacting with the brain's network of receptors, proteins and other chemicals in the brain, influencing sleep/wake cycles, CBD serves to regulate and reinforce a delicate endocrinal system that is easily thrown out of whack.

- CBD relieves pain and inflammation that may disturb restful sleep: Science has made leaps and bounds of progress in understanding how Cannabidoil produces calming, pain-relieving and anti-inflammatory effects, and there are years of research remaining before we understand it all.

It's known that CBD communicates with the brain at multiple levels. These communications involve many different receptors, proteins and chemicals in the brain, altering the activity of neurotransmitters, hormones and other cellular systems throughout the brain and body. With its powerful anti-inflammatory effects, cannabidoil has proven itself effective in the relief of chronic pain that may be affecting your quality of sleep. If you have trouble sleeping through the night due to chronic pain, CBD may offer you a solution.

Current studies show that CBD attaches itself to our cannabinoid receptors CB1 and CB2, which serves to maintain hemostasis in our bodies. CBD2 receptors were found in higher amounts within the joints of arthritis sufferers, and with ingestion of CBD and interaction within those receptors, and analgesic effect was noted in the diseased areas. Notably, it was found that users never developed eventual resistance to the CBD, so usage without gradual reuptake proved unnecessary. This seems to be because CBD modulates microglia activation and the inflammatory cycle, keeping your entire body in a less-inflamed general state.

A powerful anti-oxidant, CBD seems to lower cortisol stress levels, controlling the free-radicals that create inflammation, thus pain.

- Calms REM movement and dream recall that may help PTSD-related sleep disturbances: Who hasn't shot up in bed, screaming or acting out in a nightmare that seemed as real as day? Unable to get back to sleep afterwards? REM disorder is the cause of those occurrences. During REM sleep, the body is supposed to remain paralyzed, a state known as REM atonia.

PTSD differs from other anxiety disorders in the manner in which it manifests itself: sleep tends to be the arena where these traumatic experiences will be lived over and over again. When we have suffered extremely traumatic events that our brain hasn't succeeded to process, it may bring on instances of REM disorder. CBD oil has been proven to help the brain move more quickly through the REM state and increasing the state of deep sleep, the restorative sleep that

regenerates our brain. Reducing REM sleep means people dream less, improving quality of sleep and eliminating dreams that may be especially traumatic. Memory improves and symptoms of depression have been proven to lift based upon an improved quality of sleep.

### Choosing your CBD source

Confronted with the nearly unregulated nature of the hemp industry, learning to tell good CBD product from bad can become a part-time job in of itself. Hemp-based CBD oil sold online is unregulated by any government agency. Dispensaries can only sell CBD oil produced from cannabis strains in states where it is legal. If a CBD product is cheap, then it probably is.

It is important to understand the extraction process. The most advanced extraction method today is known as Co2 extraction. Ananda has patented our Pure Co2 extraction process. It is unique to any other form of extraction in the purity and density of our extractions.

We at Ananda firmly believe in the therapeutic use of full-spectrum Co2 organic hemp extraction. We have scientific proof of the Entourage Effect, and know that the savvy extraction of our CBD oil, derived from pure Charlotte's Web strain, containing the highest CBD levels, full terpene spectrum and naturally-occurring minimal amounts of THC (.3%) offers you the most effective therapeutic CBD solution available.

### Dosage and timing

Now, this subject seems highly up for debate. Most recommendations stipulate...I stopped here...I can't debate anymore :D

When appropriate doses of CBD are taken during the day (typically one dose in the morning and one in the evening), daytime performance is drastically improved, and in turn, both the "strength and consistency" of the sleep-wake cycle is also improved. Naturally, this enhances the ability for the body to enter the all-important non-REM sleep cycle at night.

Across the board, it would appear as though CBD is a natural wakefulness promoting compound. Because of this, it seems smart to recommend to take your CBD supplement or full spectrum hemp extract supplement in the morning, so as to keep you alert all day and not interfere with falling asleep.

In order to manage sleep disorders, we recommend ingesting full spectrum CBD oil daily in the form of Tinctures or Gel Capsules. The ingredients in the two products are the same, the only difference between the two is the form factor and dosage – pills vs. sublingual tinctures. The time at which you should ingest the CBD oil will vary based on your specific sleeping disorder. Meaning those with insomnia should ingest a few hours before bed and those with excessive daytime fatigue should consume when waking in the morning.

We suggest those suffering from anxiety start with 5-10mg per day of CBD. If relief is not felt at this dosage, we suggest increasing by 5-10mg until the desired effects are achieved. You'll notice that the

Gel Capsules are pre-filled and contain 25mg of CBD per pill – there is no harm in starting at 25mg CBD daily as you cannot overdose on CBD nor are there any serious side effects. These ingestible products provide sustained relief for several hours – many people find they provide relief for the whole day – or night as the case may be! The one thing to keep in mind with ingestible CBD products is the delayed onset time – it can take up to 90 minutes for the full effects of the tinctures or capsules to be felt.

For more immediate results, we recommend vaporizing CBD isolate to combat sleeping disorders. The benefit of vaporizing or dabbing CBD isolate is that the relief can be felt almost instantaneously. CBD isolate is 99% pure CBD and provides a wave of relief that can be felt throughout the whole body.

People who use CBD hemp oil for sleep have reported that using CBD products a few hours before bedtime promotes a good night's rest.

But the question is: how much CBD should you take if you want to use CBD oil for sleep?

We generally recommend you figure out your own unique dosing protocol since everyone is different (start with a low dose and work your way up).

This time around, we are referring you over to the Mayo Clinic's dosing protocol for using CBD oil for sleep.

The Mayo Clinic recommends you take 40 to 160 mgs of CBD by mouth before going to bed.

Again, we always recommend you start low with CBD dosing and work your way up.