

LÉVO[®]



SLEEP GUIDE



Contents

<u>Introduction</u>	3
<u>Why Sleep is Important</u>	4
<u>How Can CBD Help You Sleep?</u>	5
<u>Using CBD for Sleep</u>	6
<u>Finding The Right CBD</u>	7
<u>How To Convert THC to CBN</u>	7
<u>Recipes</u>	8
<u>About LEVO Oil</u>	10



INTRODUCTION

Using CBD or CBN for sleep

is becoming a popular trend, and for good reason. With nearly 70 million Americans suffering from a sleep disorder, it's no wonder people are looking for a natural sleep aid, especially when the effects of pharmaceutical sleep aids can last longer than desired and leave you feeling groggy or nauseous.

Not getting enough sleep can be detrimental to your health and wellbeing.

Our bodies use the time we spend sleeping to clean and heal, and without the proper amount, those tasks don't always get completed.

Fortunately, as researchers continue to dig into CBD and all it can do for us, we're finding that it might be an answer for those suffering from insomnia and other sleep disorders.

In this Sleep Guide by LÉVO & North American Spine and Pain, we will cover the basics of how you may be able to use cannabis to help aid your sleep.



Why Sleep Is Important



Sleep is as crucial to our survival as food and water.

While we sleep, our body and brain stay busy cleaning and organizing so we can function at our best the next day. The brain works to get rid of toxic waste and store new information, while nerve cells support the brain by communicating and reorganizing.

At the same time, the body is restoring its energy, repairing damaged cells and muscles, and releasing molecules like hormones and proteins. Without enough sleep, our bodies aren't able to finish everything to be prepared for the next day.

Troubled sleeping can come from larger issues like insomnia or sleep apnea, but it can also be caused by other factors such as diet, stress, or overstimulation before bedtime.

Luckily, scientists are discovering that CBD and CBN may be able to assist with a lot of those issues, helping you to fall asleep and stay asleep.

How Can CBD or CBN Help You Sleep?

Cannabidiol, or CBD, is non-psychoactive and works with several systems in the body that are involved with our sleeping patterns. For starters, it interacts with our endocannabinoid system (ECS), a system that's responsible for maintaining balance within the body and plays a huge role in how we sleep. Not only does the ECS help regulate physical functions, it helps with emotional functions as well and has a hand in how we feel stress and anxiety, which are two reasons you may have difficulty sleeping.

Within the ECS, CBD inhibits the breakdown of endocannabinoids like anandamide, a mood-enhancing chemical our brain creates. This blockage creates an increase of anandamide levels in the brain, in turn reducing anxiety which can help you fall asleep easier.

Outside the ECS, CBD stimulates our 5-HT1A (hydroxytryptamine) serotonin receptor. Releasing serotonin into the brain has

an anti-anxiety effect that can help calm your brain before sleep. More importantly, your body needs serotonin to create melatonin, a hormone that promotes healthy sleep and helps orient your circadian rhythm (the 24-hour cycle your body follows).

Studies are also finding that CBD may decrease levels of cortisol in the brain, a hormone that's associated with waking up several times a night when present at high levels. Plus, CBD can help reduce pain, a common symptom of restless leg syndrome and a common cause behind trouble sleeping.

Similar to CBD, CBN, or Cannabinol, it is touted for its medical benefits like pain and sleep management. It's earned itself the nickname, "the sleep cannabinoid," for its sedative effect. While it interacts with the same receptors in your body as CBD, it can feature mild psychoactive effects when taken in large doses.

Using CBD or CBN for Sleep

With the number of different CBD goods on the market today, finding the best CBD product for sleep can be overwhelming.

When it comes to sleep, you're probably going to want something that offers full-body effects like an edible or sublingual CBD oil as opposed to something that targets a specific area like a topical. However, if pain in a certain area is the main reason you're not sleeping, a topical could be just what you need.

For the most part, if you're looking to feel more calm and relaxed before bed, a CBD oil or edible is going to be what you want. The CBD oil is absorbed into your bloodstream through capillaries under your tongue, while the edibles, like a CBD gummy, go through your digestive system. Both disperse CBD throughout your body, though an edible will take

longer to kick in than a CBD oil because of the digestive process. Experiment a bit to make sure you time your dosage with your bedtime.

CBN, which isn't as readily available on the market, is the degradation of THC. It is produced through the natural aging of cannabis, which means that the longer cannabis ages, the more CBN-heavy it becomes. According to some research, CBN can be produced by storing cannabis in a non-airtight container for a few weeks or months.

Another quick and easy way to produce CBN at home is through heat during a decarboxylation process of THC-dominant cannabis. The finished product, which can be infused into oil, butter, and other liquids, can then be used to create the same edibles or topicals made with CBD.

Finding the Right Strains for Sleep

Once you find the perfect strain, you can start making your own CBD or CBN oils or edibles at home with a kitchen tool like LĒVO. Automatic and easy to use, you can create your own CBD or CBN oil or edible sleep aid, putting you in charge of the ingredients and potency. Plus, if you're having trouble falling asleep because of pain in a specific area, you can use a LĒVO to make CBD or CBN topicals as well.

How To Convert THC to CBN using the Decarboxylation Method

Ingredients

8 to 16 grams of THC-dominant cannabis

Instructions

Break your cannabis into pea-sized pieces and place into Power Pod. Close the lid of your LĒVO and choose the Activate cycle.

Run an Activate cycle. If using LEVO, use the default temperature setting of 240°F, increase time to 180 minutes (as opposed to the 40 minutes it takes to convert THCA into THC). If using an oven, set temperature to 320°F and heat for 60 to 90 minutes.



Basic Infusions

For each infusion, pack the LÉVO herb pod with your fresh botanicals of choice, or coarsely ground dried versions. Too fine of a grind and your herbs will leak out of the pod; too coarse and you'll miss out on maximum infusion.

After infusing, use your LÉVO herb press to get every last drop. Store in an airtight container or freeze into herb cubes using your LÉVO herb blocks.

The amount of time you want to infuse will vary based on your herbs, so be sure to reference the time and temperature calculator at levooil.com/pages/calculator

Honey Infusion

Set the LÉVO temperature to 105°F and add 2 cups of honey, plus 1/2 cup / .25 oz of your herbs of choice. Infuse for 30-120 minutes, depending on your herb choice and desired strength (according to the calculator above).

Butter Infusion

Set the temperature to 160°F and add 4 sticks of butter into chunks, plus 1/2 cup / .25 oz of your herbs of choice. Infuse for 30-120 minutes, depending on your herb choice and desired strength (according to the calculator above).

Coconut Oil Infusion

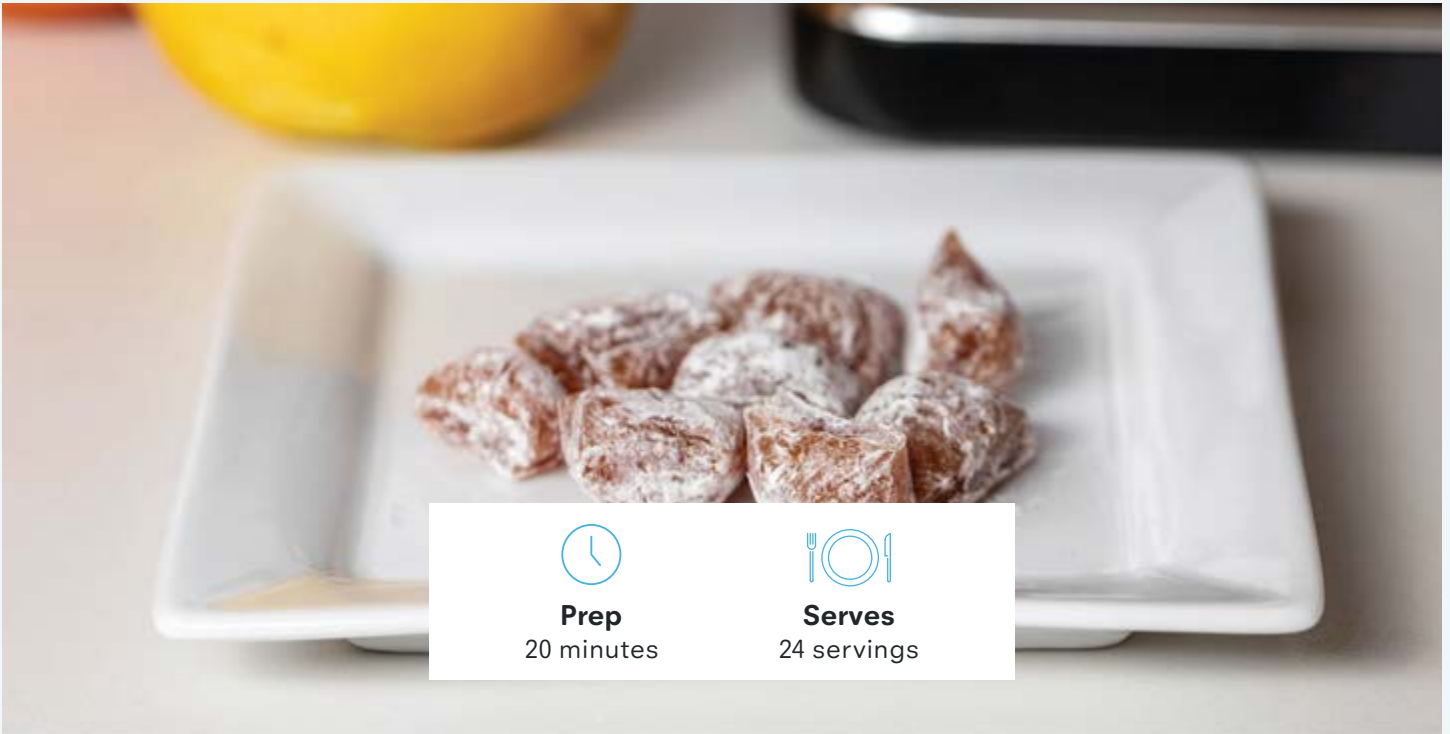
Set the temperature to 160°F and add 2 cups of coconut oil, plus 1/2 cup / .25 oz of your herbs of choice. Infuse for 1-3 hours, depending on your herb choice and desired strength (according to the calculator above).

Olive Oil Infusion

Set the temperature to 160°F and add 1 1/2 cups of olive oil, plus 1/2 cup / .25 oz of your herbs of choice. Infuse for 1-3 hours, depending on your herb choice and desired strength (according to the calculator above).

Power Gummies

The almighty gummy. It's not just for Flintstones anymore, it's for getting bedrocked. There are as many recipes out there as there are colors in a bag of Haribos, but we've picked one that's super simple to make, delicious, and packs a punch.



Ingredients

- 1 6 oz package of your favorite flavor of Jello-O, Royal Gelatin, Jolly Rancher Gelatin, or generic gelatin mix
- 1 ½ cups orange juice
- ½ cup infused honey
- ¼ cup infused coconut oil
- 4 packets unflavored gelatin
- Cornstarch to sprinkle
- 3 tablespoons infused honey

Preparation

Mix the flavored gelatin with 1 cup of orange juice in a saucepan, over low heat.

Once it's combined, add the infused honey and infused oil, constantly whisking. With your free hand (or a cooking colleague) mix all four packs of unflavored gelatin with the rest of the OJ, and let it sit for 5 minutes.

Add the OJ gelatin mixture into the pot and keep cooking over low heat, for 5 minutes. Don't stop whisking! Be sure to scrape the sides and bottom so none of the mixture burns. Pour everything into small silicone ice cube trays, to use as molds. Let them cool completely on the counter, then put them into the fridge.

Let set for 1 hour, then pop them out of the tray into a bowl. Sprinkle them all over with corn starch, to keep from sticking to each other, and store in an airtight container.

About LĒVO

Take your herbal infusions to the next level.

No matter your herb of choice, LĒVO smartly infuse oils, butters, honeys, and more with essential flavors and nutrients, all at the touch of a button.

With precise time and temperature controls, it dries and activates your flower before infusing it, optimizing shelf life and unlocking maximum potency.

Beautifully designed for your kitchen countertop, LĒVO reduce odor, leave no mess, and are dishwasher safe. An absolute must-have for the health-minded infüsiast.



www.LEVOoil.com

About North American Spine & Pain



www.naspacmd.com

North American Spine & Pain Consultants are the experts in spine and pain care. With multiple locations in PA, NJ, and De, we provide individualized, state of the art program to get you better.

In addition to standard medical care, we are very supportive of our patients using CBD products since it is not only non-psychoactive, it is also a great natural way to assist with our patients who have trouble sleeping due to pain. We also provide approvals for patients wishing to enter the Medical Marijuana Program (MMP) in each respective state.

Our new partnership with Levo Oil allows us to offer a way for our patients to create their own edibles to help with their medical needs. We are more than excited for what the future holds.