

CBD *for* PETS

A PET PARENT'S GUIDE

Basics,
Safety &
Dosage



ELOVA
Animal Health

A woman with long, curly, light-colored hair is smiling and holding a white, fluffy dog. The dog is looking towards the camera with its mouth open, showing its tongue. The background is a blurred green field.

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Over the past few decades, there has been an explosion of research into the health benefits of cannabinoids with respected health care experts such as Dr. Sanjay Gupta touting its benefits. Add to that changes in both state and federal laws, coupled with increased media coverage, and the message about the healing powers of cannabinoids are beginning to reach the masses.

One cannabinoid in particular is getting a lot of attention.

Cannabidiol (CBD) is fast becoming one of the most sought after natural therapeutic compounds currently available. And with more and more people experiencing relief from a variety of symptoms when supplementing with CBD, a lot of them are interested in using it for their pets.

Unfortunately, despite this surge in interest in CBD, there is still relatively little information available to pet parents about using CBD for their pets. That is why we at ElovaPet put together this quick-read guide to help you understand the basics of CBD and give you the tools you need to use CBD safely for your pet.

We will answer questions such as what CBD is, how it works for your pet, and the health conditions for which it can potentially help. We explain different types of CBD products currently available on the market for your pet, how to use them as well as how much CBD to use for your pet.

As fellow pet parents, we know how challenging it can be to sift through all the information appearing about CBD. With the comfort and safety of your four-legged family members in mind, we've developed this guide to make it simpler for you. The information contained in this guide is current, unbiased, and based on scientific sources.

Spread the Love!

THE BASICS

CBD *for* **PETS**

1

WHAT IS CBD?



Cannabidiol, most often simply referred to as CBD, is a type of plant compound called a phytocannabinoid that is found primarily in the flowers and leaves of the hemp and cannabis plant¹. It is also one of the most researched of all the cannabinoids, showing promise as an effective therapeutic agent for a variety of medical conditions in both humans and animals. CBD is also non-intoxicating and non-psychoactive, meaning that it does not produce the “high” usually associated with cannabis.





Is it Safe for Pets?

As is the case with any medication or supplement, there is always a potential risk of a negative reaction. Also, to date, the U.S. Food and Drug Administration 5 has not approved CBD for use in pets making some people hesitant to give their pets CBD. With that said, the safety profile of CBD is well established in both animal studies and clinical trials on humans 6. And, as mentioned earlier, because CBD is non-psychoactive, you can take full advantage of the therapeutic benefits of CBD without having to worry that your dog or cat will end up feeling “high”.

In short, if you keep a few things in mind and follow a couple of guidelines (more on that in Chapter 3), there is no reason why you should not be able to safely supplement your pet with CBD.



Is it Legal?

Since the introduction of the “Farm Bill” which removed federal restrictions on industrial hemp, the CBD oils and products that are available legally in the United States are derived from this one particular cultivar of the cannabis sativa plant. Hemp-derived CBD is federally legal as long as it is produced within the regulations defined by the law and contains less than 0.3 percent THC 2, 3. On the other hand, if the CBD extract comes from what is commonly referred to as “cannabis” and “marijuana” (referring to cultivars of the cannabis plant that contain high concentrations of THC), then the CBD oil or product is not federally legal, though it may be legal in some states where medical and recreational cannabis is lawful 4.

OTHER **THERAPEUTIC** COMPOUNDS

CBD is not the only therapeutic compound in the hemp and cannabis plant. There is also a range of other cannabinoids, each with their own set of benefits as well as aromatic compounds called terpenes. Let's take a look.

Cannabinoids

To date, almost 200 cannabinoids have been identified. About 83 of these are classified as a phytocannabinoids. In addition to CBD, five other cannabinoids are commonly found in the hemp and cannabis plants and contribute to the beneficial properties of the plant.

Tetrahydrocannabinol (THC)

Next to CBD, THC is probably one of the most well-known of the phytocannabinoids. It is also responsible for cannabis' psychoactive effects. Because of this, and recent research indicating that it is potentially toxic to cats and dogs, it is best to avoid using THC for your pet. 7

Cannabigerol (CBG)

CBG is another non-intoxicating cannabinoid. Scientists believe CBG may have analgesic, anti-inflammatory, anti-bacterial and anti-cancer properties. It is also now being researched extensively for its ability to promote bone growth after trauma as well as in pets suffering from osteoporosis. 8

Cannabichromene (CBC)

Yet another non-psychoactive cannabinoid, scientists believe that CBC may have several therapeutic benefits in both humans and animals, including acting as an analgesic, anti-inflammatory, anti-depressant, anti-cancer and neuro-regenerative as well as promoting bone growth. 9

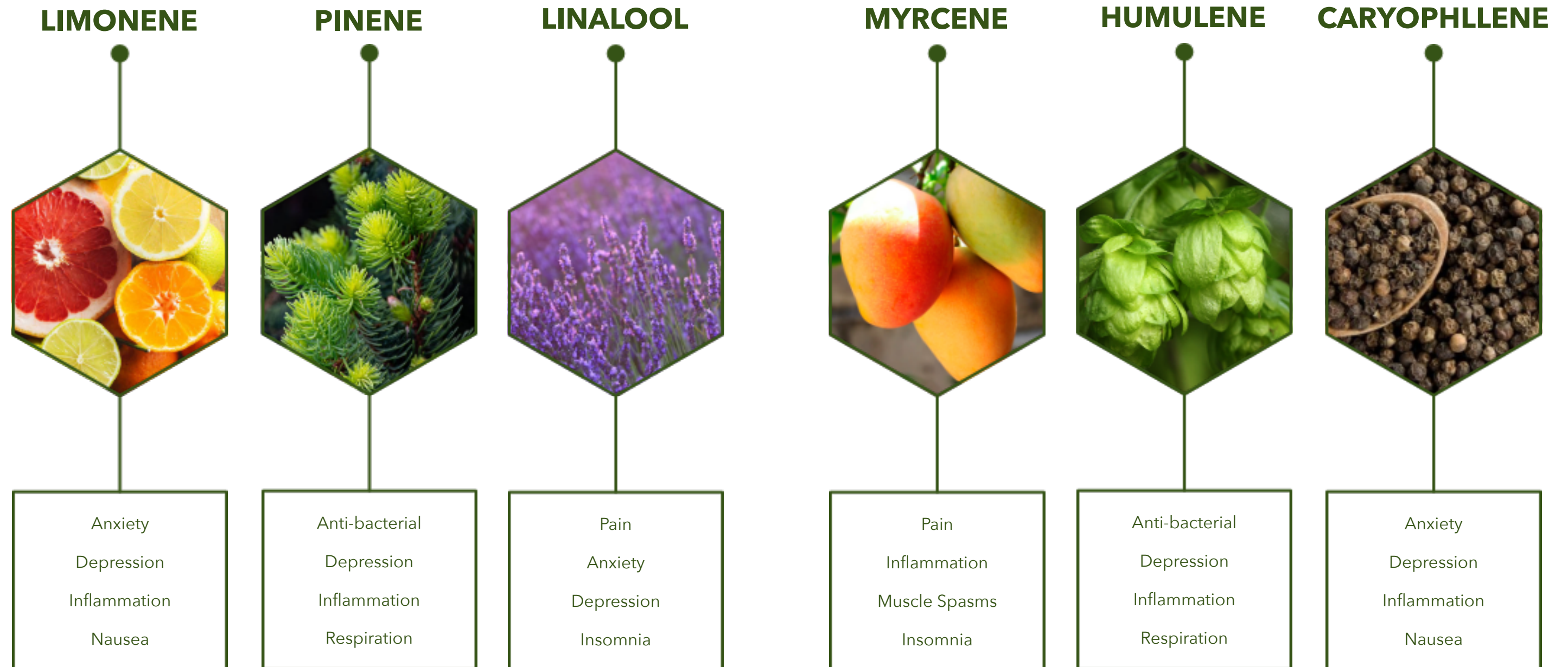
Cannabichromevarin (CBN)

CBN is a mildly psychoactive cannabinoid that is produced from the degradation of THC. CBN is believed to have analgesic, anti-inflammatory, sedative, and anticonvulsant properties, and is especially useful for pets suffering from seizure disorders. 10

Terpenes

Terpenes are another type of compound produced by most plants. They are what gives flowers, herbs and plants their distinctive aromas and flavors as well as their many therapeutic effects 11.

Terpenes have a long history of use in natural remedies such as aromatherapy, as well as a variety of supplements and cosmetics.



THE ENTOURAGE

Effect



Herbalists and holistic medicine practitioners have always known that the whole-plant works better than its singular compounds. In the world of cannabinoid research, the entourage effect was first discovered in 1998 by professors Raphael Mechoulam and Shimon Ben-Shabat 12.

The entourage effect centers around the idea that when all the compounds found in the hemp or cannabis plant are ingested together, they work together synergistically. In other words, they support and amplify each other, making for a more powerful and beneficial end product 13.

The entourage effect is critical to bear in mind when choosing a product for your pet. Many researchers and vets who use cannabinoid medicines in their practice agree that the Entourage Effect is real. Pets just seem to respond better to products which contain whole or broad-spectrum extracts.

Types of CBD Oils & Extracts

CBD oils can come in a variety of different forms types and grades - each of which has its own set of qualities, benefits and drawbacks. That is why it's essential to understand the differences when choosing a product for your pet.

Full-Spectrum

Full-spectrum CBD oils are products containing whole-plant extracts that still have all the cannabinoids, terpenes and flavonoids contained in the hemp plant. Full-spectrum products are considered by some to be the most therapeutically beneficial because of what is known as the entourage effect.

Broad-Spectrum

Broad-spectrum CBD is very similar to full-spectrum in so far as it contains all compounds present in the hemp plant. Still, unlike full-spectrum CBD oils, all THC has been removed. Broad-spectrum is a particularly good choice for pet owners who don't feel comfortable giving their pet THC or for pets who are sensitive to it. Broad-spectrum products offer all the benefit from the entourage effect, but are THC-free.

CBD From Isolate

Because there is a misconception that other cannabinoids are potentially harmful to pets, many pet owners are advised to use CBD oil made from isolates. As the name suggests, these products have had all other cannabinoids, terpenes and plant compounds stripped and contain only a CBD Isolate that is close to 99.9% pure.

Hemp Seed Oil

Technically not a CBD oil, hemp seed oil is extracted from the seeds of the hemp plant and contains no cannabinoids. However, it is rich in a variety of vitamins, minerals and essential fatty acids that may be highly beneficial for your pet. It can make an excellent carrier medium in many CBD products.



How CBD Works

for PETS

"Some days are just better than others."



The Endocannabinoid System

The reason why CBD and the other plant cannabinoids are proving to have so many different therapeutic and beneficial properties is that they interact directly with many of the physiological and biological systems found in the body of all mammals, including your pet's, through something called the endocannabinoid system (ECS) 1.

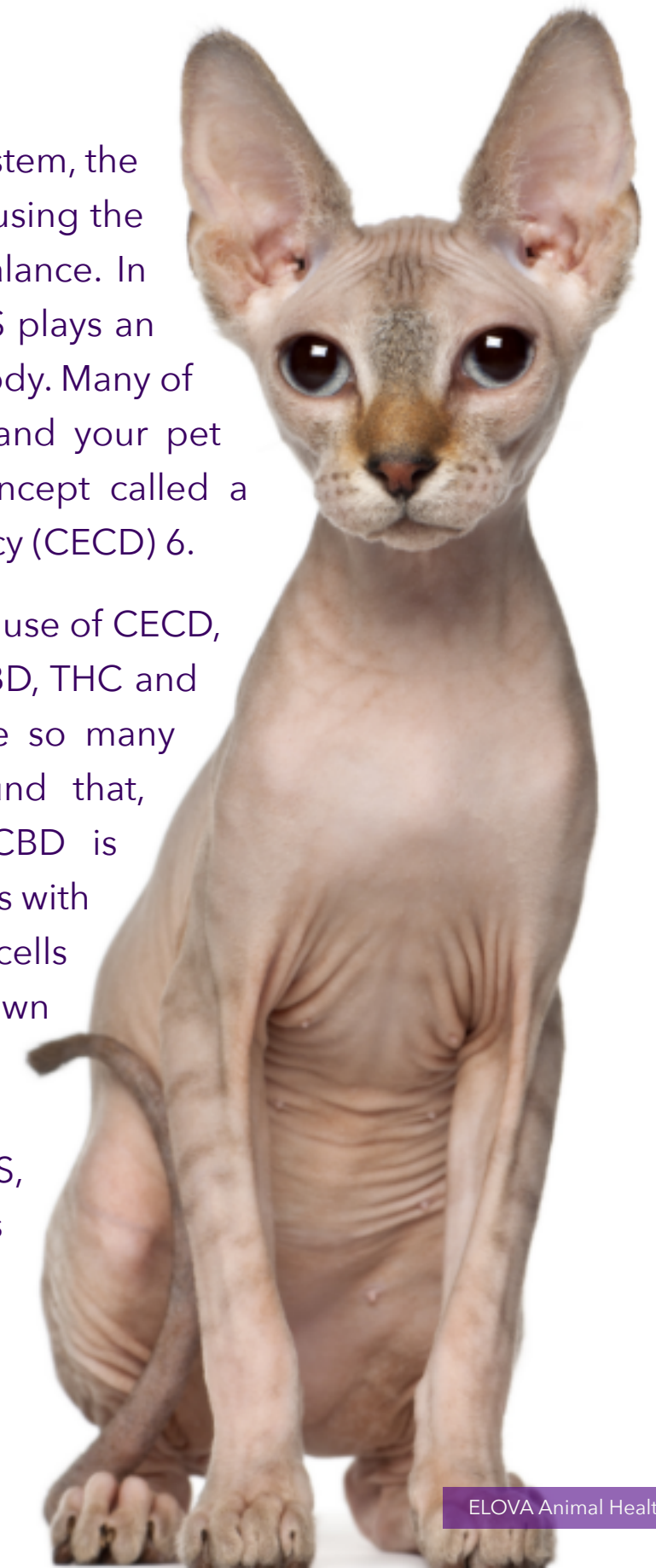
Think of the ECS as the body's natural, biological endocannabinoid-producing system that allows both you and your pet to experience the beneficial effects associated with CBD 2, 3, 4.

Your Pet's Endocannabinoid System

The ECS is fundamental in helping the body stay healthy by helping maintain a constant state of homeostasis. Homeostasis is a kind of "Goldilocks" zone where all conditions are just right for all cells, tissues and physiological systems to work at their best 5.

Unfortunately, just like any other system, the ECS can become dysfunctional, causing the body to fall out of this state of balance. In fact, scientists now believe the ECS plays an essential role in the health of the body. Many of the symptoms and diseases you and your pet experience may result from a concept called a Clinical Endocannabinoid Deficiency (CECD) 6.

Scientists also believe that it is because of CECD, that phytocannabinoids such as CBD, THC and CBG have the potential to relieve so many symptoms. Researchers have found that, when a phytocannabinoid like CBD is introduced into the body, it interacts with and regulates the same receptor cells with which your very own endocannabinoids and other types of neurotransmitters interact. This then helps kick-start the ECS, and rebalance the body and its systems again 7, 8.



"Nope, don't wanna."



CBD *for* PETS:

Common Conditions

Unfortunately there is still relatively little research thus far that focusses specifically on the effects and benefits of CBD for pets. However, there is an ever growing body of scientific and clinical evidence from both animal and human trials showing that CBD interacts with the ECS as well as many other biological and physiological systems, to produce powerful effects. Because these systems work fundamentally the same way in all mammals, we can draw several conclusions from these studies, about the types of symptoms and conditions for which CBD may provide your pet relief 8.

Pain & Inflammation

There are many reasons why your pet may experience pain. One major reason is due to inflammation, but it can also be the result of some type of injury, disease or even some other form of medical intervention like surgery or cancer treatments. Several animal studies have shown that CBD can help reduce both pain and inflammation by suppressing the receptors responsible for pain as well as pain processing directly, while also helping to decrease the activity of the inflammatory enzymes in the same way as non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen do. 9, 10, 11

Stress & Anxiety

Just like us, our pets can suffer from stress and anxiety. Whether it's a chronic issue such as separation anxiety or something more sporadic like fear of fireworks, if your pet is stressed or anxious it can be traumatic experience. CBD is well known to help reduce the symptoms of stress and anxiety by binding to the serotonin receptors, which are responsible for fear. At the same time, CBD also prevents overstimulation of ECS receptors while boosting the production of the endocannabinoids responsible for mood and memory 8, 12, 13.

Mobility & Arthritis

As our pets get older, they may start struggling with the same types of issues we do. The most common problems are mobility issues and arthritis characterized by inflammation and something called oxidative stress. As we've seen, CBD is a potent anti-inflammatory, working as well as NSAID's like Ibuprofen and Naproxen. Still, it also works against oxidative stress - the immune system's response to inflammation that causes tissue damage and dysfunction, and that is responsible for mobility issues and pain. ^{14, 15, 16}

Adjunct & Palliative Therapy

One reason why many pet parents start to investigate CBD for their pets is as either an adjunct or palliative therapy to help their dogs and cats. CBD can help reduce the side effects of or even replace some medications their pets are taking. CBD may also help treat symptoms of more serious conditions such as cancer and epilepsy. For instance, CBD is widely used as an anti-epileptic in both humans and animals ¹⁷. Similarly, CBD is known to help reduce nausea, rapid weight loss, dehydration and fatigue associated with chemotherapy. CBD has also show potential as an anti-cancer agent by cutting blood flow to and causing tumorous cell death as well as preventing cancer cells from metastasizing ^{18, 19, 20, 21}

Health & Wellness

As mentioned earlier, the main reason why CBD is so good at what it does is that it induces a state of physiological and chemical balance in the body, allowing it and its systems to function at their best. That is why many pet owners are not only using CBD to treat specific conditions, but are also using it as a nutritional supplement to promote overall health and wellness and help prevent future health issues ⁸.





3

LOVE HUGS & KISSES

CBD Questions:



What is it?
When to use it?
How to use it



CBD Oils & Extracts

What is it

CBD oils contain either a full-spectrum, broad-spectrum CBD extract or a CBD isolate blended with a carrier medium such as hemp oil, vegetable glycerin, or a medium-chain triglyceride (MCT) oil. CBD oils allow for more precise dosage and faster response time than edibles or topicals. CBD oils and extracts are also much more potent compared to other CBD products. That is why they are used as the foundation for some other cannabis concentrates that we will discuss below.

When to use it

Think of CBD oil as being similar to and acting like an oil-based health supplement. But because CBD oils and extracts are much more potent compared to other CBD products, they are also the best option when treating specific health conditions. At the same time offering you more control over how much CBD your pet is ingesting.

How to use it

For best results, fastest onset time and maximum absorption, CBD oils and extracts should be administered directly into the mouth. However, if you have difficulty giving your dog or cat the oil by mouth, you can also add a few drops to their food and mix. Bear in mind though that broad-spectrum CBD oils can be quite pungent and your pet might not like the taste of it on their food. Therefore it might be best to opt for a CBD oil product that is formulated specifically to be added to food.

If you're looking to try CBD for your pet, it can be a bit of a challenge to decide which type of CBD product will work best for your pet's needs.

With this in mind, we've broken down the most common CBD pet products currently available on the market, what to use them for and the best ways to administer them.



CBD Treats & Edibles

What is it

Pet edibles are made by mixing CBD oils with dog treat ingredients. Most commonly, CBD is infused with the butter or added directly to the recipe as the oil extract. However, unlike CBD oils, CBD treats take longer to absorb because it has to go through the digestive process first. This means that the onset time is longer, and there is the potential for varying levels of potency.

When to use it

As pet parents, we've all experienced how difficult it can sometimes be to give medicine to your cat or dog. They may simply refuse to open their mouths and run away. This is where CBD treats come in handy. Think of CBD treats as being similar to CBD oil, giving your pet all the benefits of a CBD oil that's perfect for both symptom relief and general health - but in the form of an easy to swallow and enjoyable snack.

How to use it

CBD edibles are given by mouth in the same way as you would any other type of treat. Because CBD treats look innocuous and your pet enjoys them, it might be tempting to give them more than what is recommended. However, it's vital to stick to the dosage guidelines as overconsumption is the most significant risk when using CBD for pets. But ultimately, CBD treats are an excellent choice when administered and consumed responsibly.



CBD Topicals

What is it

CBD topicals are creams, lotions and balms that are infused with CBD oils or extracts. Many topicals are also blended with other therapeutic ingredients like herbal extracts, cooling menthol or a warming agents, as they may help speed up the healing process and offer additional healing effects. As with edibles, it's important to remember that the potency of CBD topicals is markedly lower than that of a CBD oil or extract. With transdermal delivery, CBD does not generally reach the bloodstream.

When to use it

CBD topicals are traditionally used to provide localized pain relief and an immediate soothing sensation for pets suffering from body aches and pains as well as inflammatory conditions such as arthritis. This is especially true for older, geriatric dogs facing joint pain or weak bones. These types of products are also great for helping relieve things like skin allergies, eczema and other types of skin issues due to CBD's calming effects.

How to use it

Only for external use, CBD creams, lotions and balms are applied directly to the skin. When applied on the skin, CBD can be absorbed into the surrounding tissues to relieve a variety of different symptoms ranging from weak joints, muscle pain and inflammation to allergic reactions. CBD topicals are a great option for pets who need localized and consistent relief throughout the day.





Dosage

How much your pet weighs is the most critical starting point when figuring out a starting dosage. The general rule of thumb is that the smaller your dog or cat, the lower the effective starting dosage should be. That is why you'll find many of the more reputable pet CBD brands offer their products in a variety of potencies and strengths, often based on weight or size categories. Always choose a product that corresponds with the weight and size of your pet.

The amount of any type of CBD product you give to your cat or dog will depend on two main factors:

- *How much your pet weighs*
- *What you're using the product for*

Another essential factor to consider when deciding on how much CBD to give your pet is the intended use. If you're giving your pet CBD for general health and wellness, or as a preventative supplement, the product's recommended dosage should be fine. However, if you're giving your pet CBD to help with recovery from a serious injury, illness or disease, you should start with the recommended dosage and steadily increase it until you achieve your desired results.

One thing that makes dosing tricky when it comes to CBD is that it presents with a "biphasic response". This means that low dosages can result in a certain set of effects addressing a specific set of clinical issues. In contrast, larger dosages can produce another set of effects addressing a different set of clinical problems

While there has been very little research done on dosages for veterinary usage, there is useful data available from trial-and-error, and anecdotal evidence from veterinarians who have been recommending CBD for their patients.

As a result, we do know that it's best to "start low and go slow" with a low dosage considered to be less than 0.5 mg CBD per kilogram of body weight per day.

The reason for starting with lower dosages and steadily working your way up, is because each animal will respond differently. A small portion of pets may develop side effects even at these lower dosages. Similarly, because of the biphasic effect of CBD, your pet may simply not need higher doses. In fact, based on anecdotal reports by veterinarians and pet owners, doses of between 5 and 40 times less than what is considered a large dose have proven to be just as effective for certain conditions 1.

When To Use More?

Once you've started your pet on a small dose of CBD, and if they don't experience relief, it is recommended that you slowly increase the dose after 10 to 14 days twofold every other week up to 2.0 mg of CBD per kilogram of body weight per day and until you've found a dosage that works for your pet.

When Is It Too Much?

The safety profile of CBD is well documented with no known or documented overdoses on a full-spectrum CBD hemp product ever reported in humans or animals. That said, if you accidentally give your pet too much, rest assured that CBD is well tolerated even at very high dosages. The most common side effect of overconsumption is drowsiness. More serious side effects can sometimes include excessive itching or mild vomiting. Still, with proper dosing and careful observation, these side effects are rarely encountered. However, if your pet does present with any of the above symptoms or exhibits a greater sensitivity to CBD, it's best to stop using it immediately and consult with your veterinarian.

"Did you hear that?"

"What was that noise?"





As Pet Parents, keeping your pets healthy, comfortable and safe are your top priorities. That is why many people are looking into the benefits of CBD for their pets. Even if you're a pet parent that have done their research, you may still have unanswered questions about CBD for pets as well as the CBD industry itself. For instance, the body of research for the veterinary use of cannabinoids such as CBD is limited, although this is slowly starting to change now ¹. Similarly, the CBD industry is pretty much unregulated. Unfortunately, many companies simply lack the expertise to ensure the safety, consistency and purity of their products. While these concerns are valid, there are a few things you can do to ensure your pet's comfort and safety while also providing them with the potential therapeutic and health benefits of CBD.

Things to Keep in Mind

1. Do Your Research

Always do your research about the company from whom you're thinking of buying CBD. They should be transparent about where their raw materials come from as well as their manufacturing processes. Always choose products produced in facilities that are certified for current good manufacturing practices (c GMP). Similarly, CBD companies should also be transparent in their labeling, with products at a very minimum displaying the following information:

- a statement of identity
- the quantity of CBD
- an ingredient list, nutritional facts panel and supplement panel
- the name and place of business of the manufacturer, packer or distributor
- a batch number for quality control

2. Choose a Product Formulated for Pets

It's easy to conclude that because a CBD oil developed for human use is working for you, it will also work for your pet. But please resist the urge to use your own CBD product for your pet as well. Often products formulated for humans contain ingredients that can be harmful to your pet. For instance, xylitol which is commonly found in CBD gummies and some flavored oils, is highly toxic to animals. The same goes for other types of flavorings and colorings - even if they are natural. Always choose a product that has been formulated by experts for use in pets.



3. Full-Spectrum vs Isolate CBD products

Many CBD brands that carry products for pets are adamant that CBD isolates are the way to go. That's because many of them feel that THC poses a danger to pets and it's better to leave it out altogether. However, this is not always the case. Many veterinarians, animal health care providers and researchers who use full-spectrum CBD products find that with an appropriately small amount of THC (usually the 0.3% found naturally within the hemp plant and hemp derived full-spectrum CBD extracts) when dosed correctly is perfectly safe.



4. CBD Is Not a Miracle Cure

Despite what some marketing campaigns and CBD brands tell you, CBD is not a miracle cure. It will not immediately solve all your pet's health issues. From what we do know, it is clear that CBD has a wide range of potential therapeutic properties and applications. Still, it is also clear that we don't know everything there is to know and more research is needed. Similarly, when treating your pet with hemp-based CBD products, it's important to remember that patience is key. CBD works mostly by restoring homeostasis, essentially giving the body the opportunity to heal itself. This doesn't happen overnight.

5. Adhere to Dosing Guidelines

CBD can take time to start working. This can be due to several factors, including the product's onset of action, your pet's physiology, or condition severity. It's easy to think that if it's not working right away, that more of a good thing is even better. As explained earlier, when it comes to CBD, this is not the case. And although CBD is well tolerated even at high dosages, it's still important to pay attention to dosing guidelines and stick to them, always starting with the lowest dose and monitoring and observing the effect it has on your cat or dog. Once you have a better idea of how your pet responds to CBD, you can slowly increase the dosage until you find your pet's dosage sweet spot.



About ELOVA Pet

website: elova.pet



Spread the Love!

ElovaPet is on a mission to spread the unconditional love between pets and their families by providing you with premium quality CBD-infused pet supplements AND the honest information you need to keep your pets happy and healthy from the inside out.

Formulated for Pets by Vets

ElovaPet CBD-based supplements have been specially formulated and optimized for your four-legged family member by our expert team of veterinarians, pharmacists and research scientists.

Science-based information you can Trust

ElovaPet is committed to providing you with honest, accurate, up-to-date science based CBD and pet health information and educational resources.

About ELOVA Animal Health

Elova Animal Health is an animal health and wellness company devoted to developing superior quality, natural hemp-based CBD products, and supplements for our furry friends! We're a team of seasoned biotechnology scientists & professionals, veterinarians, animal lovers, and pet parents on a mission to spread the unconditional love between pets and their families. We're committed to helping you keep your furry friends happy and healthy. Our passion and respect for animals are at the heart of everything we do at Elova Animal Health. We're 100% committed to quality, science, and transparency. We believe in investing in research and development and producing products that meet the highest possible standards.



"Huh, this ain't so bad."

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*Written & Designed exclusively for &
by Chris Borgman and the ELOVA
Animal Health Team*





Ohhh, this one smells goood!