PRISMM PET

COMFORTPET PRODUCTS



BECAUSE PETS DESERVE TO BE PAIN-FREE





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Formulated by Pharmacists. Recommended by Physicians

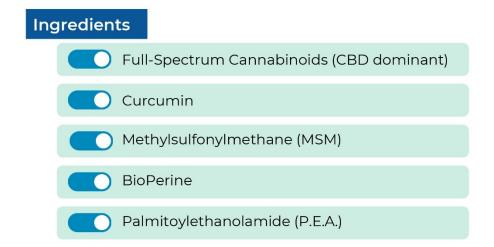


Originally produced for use in humans, the ComfortPET capsules by PRISMM Pet are now available for treating pain in dogs. Current studies have shown excellent results with the use of Full-Spectrum Hemp-based (THC content < 0.3%) cannabinoids for the treatment of pain.

ComfortPET employs a multi-modal approach to pain control in dogs(1). The multi-modal pathway approach targets your patients' discomfort, utilizing powerful ingredients that target more than just the source of pain or discomfort.

Our carefully crafted ComfortPET capsules combine our organically-sourced whole-plant hemp CBD with proven effective Active Pharmaceutical Ingredients (APIs).

All ingredients have been shown to be safe(2) and effective when used as directed.



Cannabinoids have antinociceptive mechanisms different from that of other drugs currently in use, which opens a new line of promising treatment to mitigate pain that fails to respond to the pharmacologic treatments available, especially for neuropathic and inflammatory types of pain.



Our ComfortPET capsules offer a proprietary blend of high concentration whole-plant hemp CBD, Curcumin for its anti-inflammatory properties, Palmitoylethanolamide (P.E.A.) an endocannabinoid (present in both humans and nature) has a strong analgesic as well as anti-inflammatory properties, Methylsulfonylmethane (MSM) for its action against pain and inflammation, plus D-Phenylalanine (an Amino Acid used for analgesia in chronic pain in both osteo and rheumatoid arthritis). In addition, we incorporate Bio-Perine for its analgesic properties as well as its ability to increase absorption of CBD and Curcumin.

DOSING

For dogs up to 25 lbs

Give 1 capsule by mouth or sprinkle 5mg on food, once daily as need for discomfort

Dogs 26 - 50 lbs

Give I capsule by mouth or sprinkle I5mg on food, once daily as need for discomfort.

Dogs over 51 lbs

Give 1 capsule by mouth or sprinkle 30mg on food, once daily as need for discomfort.

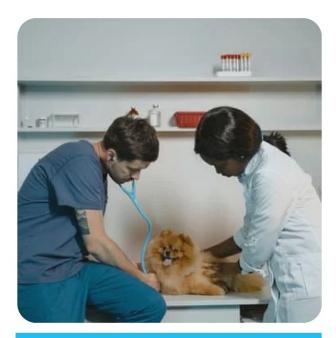
ComfortPET capsules are a product of PRISMM Earth



WHO IS PRISMM EARTH?

PRISMM EARTH was founded by practicing medical professionals, experts and world-renowned change leaders in healthcare and technology who discovered a need for safe, consistent, and effective CBD-based products. PRISMM Earth is a physician-owned, medical wellness company that recognizes the need to provide safe and efficacious hemp-derived full-spectrum CBD products to promote total body wellness.

We create Best-in-Class pharmaceutical quality products, created by using the most advanced compounding techniques, delivery systems, and methodologies while working within established State and Federal laws and guidelines.



Why use PRISMM Earth?



PRISMM Earth Product Features:

- Designed by Physicians and Pharmacists
- Made by experienced compounding Pharmacists using organic ingredients
- Made in a laboratory meeting United States Pharmacopeia (USP <795>) standards,
- Our organic hemp CBD products have less than 0.3% Tetrahydrocannabinol (THC)
- ➡ Have Amino Acids, etc. that the FDA considers Generally Recognized as Safe (GRAS)

PRISMM Earth Products are:

- Unique (advanced delivery systems) for all types of patients
- Multi-modal (multiple mechanisms of action using a variety of ingredients),
- Clean (organically grown in a pesticide-free environment)
- Consistent (per established compounding Pharmacy standards)
- Efficacious (their effectiveness speaks for themselves)

PRISMM Earth holds a Nevada State Hemp Handler's Permit

PRISMM Earth demands that the highest level of quality exists in every step of our processes from Farm to Patient.

The PRISMM Earth Difference



| PARAMETER | PRISMM EARTH | OTHERS |
|---|-----------------|---------------------|
| Preparation | | |
| Owns Certified State Department of Agriculture Hemp Handler's Permit | Yes | No/ Possibly |
| Full Transparency on Processing | Yes | No |
| Soil Tested Prior to Grow (Heavy Metal Content) | Yes | No |
| | | |
| The Grow | | |
| Site Visits by Medical Professionals | Yes | No |
| Pesticide Free | Yes | No |
| Certificate of Analysis Provided | Yes | Yes |
| Organic Plants (Full Spectrum) | Yes | Some Make Claims |
| "Specialty" Chemovars Grown | Yes | No |
| Multiple Testing Labs Used (Assures Accuracy) | Yes | No |

The PRISMM Earth Difference

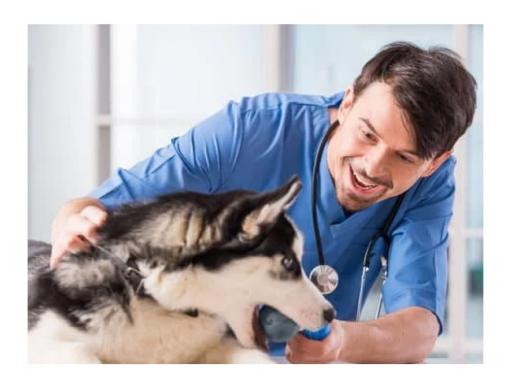


| PARAMETER | PRISMM EARTH | OTHERS |
|---|-----------------|-----------------|
| Processing and Manufacturing | | |
| Safe/Effective Extraction Methodology | Yes | Some |
| Physician/Pharmacist Created Products | Yes | No |
| Products Produced by Compounding Experts | Yes | No |
| Additional Ingredients Added to Enhance Product | Yes | Rarely |
| Specialty Products Produced | Yes | No/ Rarely |
| Consistent Final Products with CoAs (Quality and Duplicability) | Yes | Some |
| | | |
| Unique Product "Delivery" Systems | | |
| Extended Release" Capsules | Yes | No |
| "Scored" Troches (Lozenges) for Dosage Titration | Yes | No |
| Liposomal Base Cream for Complete Product Absorption Through the Skin | Yes | No/ Possibly |
| Topi-Click Cream Dispenser (Uniform Dosing – Eliminates Cross Contamination) | Yes | No |
| Sublingual Spray (Under the Tongue) | Yes | No/ Possibly |

The PRISMM Earth Difference



| PARAMETER | PRISMM EARTH | OTHERS |
|--------------------------------------|-----------------|-----------------|
| Dispensation/Follow-Up | | |
| Dosing Parameters Provided | Yes | No/ Possibly |
| Clinician Available for Consultation | Yes | No |
| Ongoing Research | Yes | No/ Possibly |





What is Cannabidiol?

Cannabidiol (CBD) is classified as a "Phyto-cannabinoid." This means that:

- CBD is a molecule produced by the Cannabis plant.
- Classified as a Negative Allosteric Modulator (can help to reduce overproduction of neurotransmitters possible mechanism of action in the neurotransmission of pain signals).
- Synthetic and/or Isolate CBD does NOT come from nature.
- Although psychoactive, CBD does not cause intoxication.
- Thought to be responsible for the majority of Cannabis' therapeutic claims.
- Reduces undesirable effects of THC.
- Has been shown to inhibit cancer cell growth, not kill cancer cells.
- Activates Adenosine, Serotonin, and Vanilloid receptors which explain CBD's diverse therapeutic claims
- There is nothing that CBD does that cannot be enhanced by THC (Ethan Russo, MD Father of American Cannabis Science)



What is Curcumin?

Curcumin is the yellow pigment associated with the curry spice Turmeric, and to a lesser extent Ginger. It is a small molecule that is the prototypical 'Curcuminoid', and has effects similar to other polyphenols but unique since it is a different class of polyphenol (relative to the other classes of 'flavonoid', 'stilbene', etc.)

What does Curcumin do?

Curcumin exhibits an array of positive effects on the human body. Most notably, it is an antioxidant which can regulate metabolic reactions. The use of curcumin provides a potential remedy for joint inflammation. It lowers swelling and enables better movement and functioning at the site.

How does Curcumin Work?

Subsequent to the first seminal paper published in 1949 in Nature, numerous preclinical studies have provided a solid basis for examining curcumin's efficacy against human diseases. Common to all of these studies have been the safety, tolerability, and non-toxicity of this polyphenol, even at doses up to 8 g per day. The underlying mechanism for curcumin's clinical efficacy seems to be modulation of numerous signaling molecules. However, because of the complex nature of the diseases, the underlying mechanism in many cases remains unclear.

More specifically, Curcumin has been found to:

- Alleviates Pain
- Natural Anti-Inflammatory Agent
- Helps Arthritic Conditions
- Natural Bone Protective Agent
- Prevents Cartilage Degeneration
- Helps Arthritic Conditions



What is Palmitoylethanolomide (P.E.A.)?

The Multiple Target Molecule - A Key Player in the Endocannabinoid System A unique fatty acid that can be found in eggs and a variety of plant sources, and which is also produced endogenously (within our own bodies), Palmitoyl-ethanolamide (PEA) plays an important role in the body's systematic response to pain and inflammation.

What Does P.E.A. Do?

Palmitoylethanolamide (P.E.A) is an endocannabinoid-like molecule which our bodies produce as needed to deal with bodily stress, injury, or infection. It serves as part of the Endocannabinoid System (ECS): a complex communication network or cell-signaling system throughout our bodies which helps regulate a variety of functions, including protecting nerve cells, preventing arthritis and cardiovascular disease, and countering inflammation.

Is P.E.A. a Cannabinoid?

Although P.E.A itself shares many of the same functions as the phytocannabinoids in CBD (which is derived from cannabis oil), it is produced naturally by most mammals, so it receives a different medical and legal classification.

Some common food sources of PEA include milk, peas, tomatoes, corn, soybeans, soy lecithin, and peanuts.





P.E.A. and Pain

A 2017 meta-analysis investigated the efficacy of P.E.A for pain relief. Eight randomized controlled trials accounting for 743 patients receiving PEA and 460 patients given either placebo or no treatment showed a significantly greater pain reduction in those given PEA. Daily dosages ranged from 300mg to 1200mg, and treatment duration ranged from 10 to 180 days. Interestingly, there was no association between longer treatment durations and pain efficacy.

The authors found one trial that compared 2 weeks of use of P.E.A. versus ibuprofen in 24 patients with arthritis of the TMJ (temporomandibular joint). Patients given PEA has significantly decreased pain compared to those given ibuprofen. Ibuprofen treatment also resulted in 3 patients to have the side effect of a stomachache, compared the PEA group which reported no side effects.





What is Methylsulfonylmethane (M.S.M.)?

Methylsulfonylmethane (MSM) is a chemical found in green plants, animals, and humans. It can also be made in a laboratory. MSM is an excellent source of the critical mineral, Sulfur.

Sulfur is a mineral found naturally within our bodies, as well as fruits, vegetables, milk, and animal products. But many people may not get enough sulfur in their diets, especially as they age, which can have many health detriments. Sulfur is used for many processes in the body, including helping proteins hold their shape – without this, the proteins may lose their functions.

Sulfur can be supplemented in the body in a form known as methylsulfonylmethane, also known as MSM. This is an organic form of sulfur that can be found in foods we eat, such as raw, unprocessed milk, or you can take it as a supplement.

How Does MSM Work?

The sulfur mineral is a part of amino acids and actively influences the cellular functions as well as protein synthesis in your body. When a patient suffering from frequent flare-ups takes a sulfur supplement, the compounds in it can alleviate the symptoms of arthritis by stimulating the production of connective tissues and cartilage in the joints. It also acts by slowing or hindering the nerve impulses that send the pain messages to the brain.

What is this product used for?

Methylsulfonylmethane (MSM) is used by some people to help with pain, especially from arthritis. Others use it to help with an upset stomach or decrease muscle damage caused by exercise. Some people believe it helps to boost the immune system, fight infections, or help with allergies. It may also be used by some people to help fight skin conditions or hemorrhoids.



What is D-Phenylalanine?

Phenylalanine is an amino acid, a "building block" of protein. There are three forms of phenylalanine: D-phenylalanine, L-phenylalanine, and the mix made in the laboratory called DL-phenylalanine.

The stereoisomer D-phenylalanine (DPA) can be produced by conventional organic synthesis, either as a single enantiomer or as a component of the racemic mixture. It does not participate in protein biosynthesis although it is found in proteins in small amounts - particularly aged proteins and food proteins that have been processed. The biological functions of D-amino acids remain unclear, although D-phenylalanine has pharmacological activity at niacin receptor 2.[14]

DL-Phenylalanine (DLPA) is marketed as a nutritional supplement for its purported analgesic and antidepressant activities. DL-Phenylalanine is a mixture of D-phenylalanine and L-phenylalanine. The reputed analgesic activity of DL-phenylalanine may be explained by the possible blockage by D-phenylalanine of enkephalin degradation by the enzyme Carboxypeptidase A.

What is this product used for?

Your body needs phenylalanine and other Amino Acids to make proteins. It is crucial for the production of other molecules such as:

- Tyrosine, an Amino Acid produced directly from phenylalanine.
- Epinephrine and Norepinephrine, when you encounter stress, these molecules are vital for the "fight or flight" response.
- Dopamine, a molecule involved in feelings of pleasure in your brain as well as forming memory and learning skills.

Since phenylalanine is used to make these molecules, it has been used for, and currently being studied for its application as an adjunct for depression as well as pain control.



What is Bioperine?

Bioperine is an extract obtained from black pepper fruits, and so contains as much as 95% of the extract. It is usually administered together with medications or food nutrients to increase the availability of the active substance in such food or drugs. When administered alone, it won't have any active substance to enhance.

What is this product used for?

Bioperine works as that important supplement that ensures bioavailability of potent medications and food nutrients in your bloodstream, making them more available for action. Bioperine doesn't increase the effectiveness of active substances in your foods or medications, so it's not a bioefficacy supplement. But it makes such medications and nutrients more bioavailable so your body can effectively use them.

TINCTURES AND OILS



We do not recommend the use of oils and tinctures for administration in pets.

Dose is difficult to calibrate

☑ Droppers are inaccurate

☑ Droppers become clogged and messy

Pets oftentimes don't like the taste and will avoid

Most oil products on the market use either Palm or Coconut Oils

Palm Oil

While palm oil is not poisonous to dogs, it does have a laxative effect and, if eaten, can cause sickness, diarrhea, dehydration and, in extreme cases, pancreatitis. It can also cause blockages in the gut due to its semi-solid state. Some dogs have become seriously ill after ingesting palm oil.

Coconut Oil

"It provides many benefits for dogs," says Dr. Colleen Smith, DVM, CVA, CVCP of the Chattanooga Holistic Animal Institute. While coconut oil is generally safe for dogs, some canines may have an allergic reaction to the supplement. Additionally, giving a dog too much coconut oil in the diet could result in diarrhea. Smith warns against giving coconut oil to dogs prone to pancreatitis, as it can be a risk due to its high fat content.

And not all veterinarians are convinced that coconut oil is beneficial for dogs at all. Dr. Ken Tudor notes that coconut oil may possibly raise "bad cholesterol" levels in dogs and "adds 120 calories for every tablespoon without adding any appreciable nutritional value."

Also, some studies have shown that coconut oil can cause high cholesterol in dogs. In extreme cases, this can cause fatty plaques to develop in the arteries. Furthermore, due to its high calorie content, using coconut oil in excess may lead to weight gain

References



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A randomized, double-blind, placebo-controlled study of daily cannabidiol for the treatment of canine osteoarthritis pain

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O2 Front. Vet. Sci., 23 July 2018 | https://doi.org/10.3389/fvets.2018.00165 Pharmacokinetics, Safety, and Clinical Efficacy of Cannabidiol Treatment in Osteoarthritic Dogs

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ORIGINAL RESEARCH article Front. Vet. Sci., 04 September 2020 | https://doi.org/10.3389/fvets.2020.00505 Frontiers | Pharmacokinetics of Cannabidiol, Cannabidiolic Acid, Δ9-<u>Tetrahydrocannabinol, Tetrahydrocannabinolic Acid and Related</u> Metabolites in Canine Serum After Dosing With Three Oral Forms of Hemp Extract | Veterinary Science (frontiersin.org)

Pharmacokinetics of Cannabidiol, Cannabidiolic Acid, Δ9-Tetrahydrocannabinol, Tetrahydrocannabinolic Acid and Related Metabolites in Canine Serum After Dosing With Three Oral Forms of Hemp Extract

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