

Inclusion:	Pet-size animals (not rodents), any cannabinoid, original research at any clinical trial phase, surveys excluded if product name omitted					
Conclusions:	Mostly high quality evidence conducted in the past 2 years. Product names disclosed in most cases. Most convincing evidence in canine osteoarthritic pain/movement. Efficacious around 2 mg/kg and safe between 2.5 mg/kg in canines. There are no published studies on the efficacy of cannabinoids in cats - however there are two RCT looking into safety and pharmacokinetics.					
Study	Participants (N, species)	Condition	Study design	Cannabinoid, dose, product	Efficacy outcome	Additional information (study link, safety, pharmacokinetics)
Gamble et al., 2018 Pharmacokinetics, safety and clinical efficacy of cannabidiol treatment in osteoarthritic dogs	n=14, canine	osteoarthritis PK, efficacy, safety	RCT	CBD oil 2mg/kg Twice daily for 4 weeks ElieVet LLC supplied IP https://www.efelvet.com/	Sig decrease in pain and increase in activity following CBD oil admin. Owner and veterinary reports were consistent and sig diff to placebo	Additional information (study link, safety, pharmacokinetics) Data suggests that 2 mg/kg of CBD twice daily can help increase comfort and activity in dogs with OA https://www.frontiersin.org/articles/10.3389/fvets.2018.00165/full
Deabold et al., 2019 Single-dose pharmacokinetics and preliminary safety assessment with use of CBD-rich hemp nutraceutical in healthy dogs and cats	n=8, canine n=8, feline	Healthy PK, safety	RCT	CBD chews 2mg/kg Chews contained 1:1 CBD:CBDA Twice daily for 12 weeks ElieVet LLC supplied IP https://www.efelvet.com/	None	One cat showed a persistent rise in alanine aminotransferase (ALT) above the reference range for the duration of the trial. In healthy dogs and cats, an oral CBD-rich hemp supplement administered every 12 h was not detrimental based on CBC or biochemistry values. Cats do appear to absorb or eliminate CBD differently than dogs, showing lower serum concentrations and adverse effects of excessive licking and head-shaking during oil administration. https://www.mdpi.com/2076-2615/9/10/8202.htm
Brisochi et al., 2020 Oral Transmucosal Cannabidiol Oil Formulation as Part of a Multimodal Analgesic Regimen: Effects on Pain Relief and Quality of Life Improvement in Dogs Affected by Spontaneous Osteoarthritis	n=21, canine	osteoarthritis Efficacy, safety	RCT	CBD oral transmucosal (buccal) 2mg/kg twice daily 12 weeks CBD plus other analgesics Compounded CBD formulation <i>No brand or sponsor mentioned</i>	Significant reduction in pain scores and quality of life indexes when assessed by their owner. Mobility indexes	Further pharmacokinetics and long-term studies in larger populations are needed to encourage its inclusion into a multimodal pharmacological approach for canine osteoarthritis-related pain. https://www.mdpi.com/2076-2615/10/9/11505
Meija et al., 2021 Evaluation of the Effect of Cannabidiol on Naturally Occurring Osteoarthritis-Associated Pain: A Pilot Study in Dogs	n=23, canine	osteoarthritis Efficacy, safety	RCT	CBD oil Daily for 6 weeks <i>No brand or sponsor mentioned</i> <i>Unable to access full text</i>	Outcome measures were: objective gait analysis activity counts (via accelerometer) and clinical mobility instruments. There were no differences noted between groups at any time point for any of the recorded outcome measures.	https://meridian.allenpress.com/jahba/article-abstract/57/7/8/14511308/Evaluation-of-the-Effect-of-Cannabidiol-on-Naturally-Occurring-Osteoarthritis-Associated-Pain-A-Pilot-Study-in-Dogs Adverse events associated with CBD administration included elevation in liver enzymes (n = 14) and vomiting (n = 2).
Kogan et al., 2020 The Use of Cannabidiol-Rich Hemp Oil Extract to Treat Canine Osteoarthritic-Related Pain: A Pilot Study	n=37, canine	Chronic mid-to-severe pain osteoarthritis associated	Pilot RCT	CBD oil 0.25 mg/kg Full spectrum 13:1 CBD:THC HM Health LLC supplied IP https://www.hempmyvet.com/	The addition of a hemp-derived CBD oil appears to positively affect dogs with chronic maladaptive pain by decreasing their pain, thereby improving their mobility and quality of life.	Daily dose reduction of gabapentin afforded by CBD co-administration https://www.researchgate.net/publication/359688157 The Use of Cannabidiol-Rich Hemp Oil Extract to Treat Canine Osteoarthritic-Related Pain A Pilot Study
Chicotre et al., 2020 Pharmacokinetic and Safety Evaluation of Various Oral Doses of a Novel 1:20 THC: CBD Cannabis Herbal Extract in Dogs	n=13, canine	Healthy PK, safety	RCT	1:20 THC: CBD Aurora Cannabis supplied IP https://www.auroracann.com/	N/A	https://www.researchgate.net/publication/35901148 Pharmacokinetic and Safety Evaluation of Various Oral Doses of a Novel 1:20 THC: CBD Cannabis Herbal Extract in Dogs Neurological signs (hyperesthesia or proprioceptive deficits) were noted in five of six dogs in the high-dose group (up to 10 mg/kg), but only occasionally or rarely in the medium- and low-dose groups
Washling et al., 2020 Pharmacokinetics of Cannabidiol, Cannabidiolic Acid, Δ9-Tetrahydrocannabinol, Tetrahydrocannabinolic Acid and Related Metabolites in Canine Serum After Dosing With Three Oral Forms of Hemp Extract	n=6, canine	Healthy PK, safety	RCT	Full spectrum CBD extracts 2.5, 10 mg/kg (+0.3% THC) Oil, soft chews 2 mg/kg CBD ElieVet LLC supplied IP https://www.efelvet.com/	N/A	https://www.researchgate.net/publication/344165990 Pharmacokinetics of Cannabidiol, Cannabidiolic Acid, Δ9-Tetrahydrocannabinol, Tetrahydrocannabinolic Acid and Related Metabolites in Canine Serum After Dosing With Three Oral Forms of Hemp Extract All delivered formulations were safe Suggestion of synergism between CBD and CBD/THC acids A unique product, results do not translate to other MC products
McGrath et al., 2019 Randomized blinded controlled clinical trial to assess effect of oral cannabidiol administration in addition to conventional antiepileptic treatment on seizure frequency in dogs with intractable idiopathic epilepsy	n=26, canine	Intractable idiopathic epilepsy Safety, efficacy, PK	RCT	CBD oral 2.5 mg/kg BID 12 weeks In addition to anticonvulsants Applied Basic Science Corporation supplied IP https://appliedbasicscience.com/	Seizure activity efficacy endpoint. Dogs in the CBD group had a significant (median change, 33%) reduction in seizure frequency, compared with the placebo group Observed correlation between CBD plasma conc and seizure frequency	Adverse and plasma CBD also explored as safety/PK endpoints. Dogs in the CBD group had a significant increase in serum alkaline phosphatase activity (sign of liver toxicity - most likely due to drug drug interaction) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6842541/
Morris et al., 2020 The Impact of Feeding Cannabidiol (CBD) Containing Treats on Canine Response to a Noise-Induced Fear Response Test	n=16, canine	Healthy State fear and anxiety paradigm Supplementation prior to shock	RCT	CBD oral (incorporated into food) 25 mg CBD 7 days 1x- 1.4 mg/kg ActiTech Scientific supplied IP	These results do not support an anxiolytic effect of CBD in dogs given 1.4 mg CBD/kg BW/d.	https://www.frontiersin.org/articles/10.3389/fvets.2020.569555/full#section-14 WARSZY-WIKAWOJYVAJAFBNWJFFNVEIKGAUG69byMe_m825LWSmg
Drager, 2020 Cannabidiol in the horse: pharmacokinetics and effects of a patented supplement on reactivity and movement	n=24, equine	Healthy Reactivity and movement	Case report	CBD oral oil 50 mg 6 weeks EVS Pharm supplied IP	Low reactivity scores were more frequently observed in post-treatment horses During walk, post-treatment horses spent more time in stance phase	https://digitalcommons.murraystate.edu/cgi/viewcontent.cgi?article=1229&context=etd
Corsetti et al., 2021 Cannabis sativa L. may reduce aggressive behaviour towards humans in shelter dogs	n=24, canine	Aggressive phenotype	RCT	CBD oral oil 0.5 mg/kg 45 days In-house synthesized IP No externally sourced IP	An administration of CBD every 24 h did not result in any effects on behavioural categories related to stress but seemed to reduce aggressive behaviour.	https://www.nature.com/articles/s41598-021-82439-2 Additional investigations are necessary to widen the sample of dogs and to combine a behavioural therapy with CBD administration. Our results pave the way for further behavioural and veterinary studies to understand if CBD could be efficacious also in the treatment of behavioural disorders
Verrico et al., 2020 A randomized, double-blind, placebo-controlled study of daily cannabidiol for the treatment of canine osteoarthritis pain	n=not specified, canine	Osteoarthritis	RCT	CBD capsule 4 weeks 50 mg per day non-liposomal 20 mg per day liposomal Mecherle CBD supplied IP https://medferrad.com/product-cbd-metastarin?srsltid=Afmnpoo0A-randomized-double-blind-placebo-controlled-34.aspx	CBD significantly decreased pain and increased mobility in a dose-dependent fashion among animals with an affirmative diagnosis of OA	https://www.mdpi.com/2076-2615/10/9/11505 Liposomal formulation to improve bioavailability Liposomal CBD (20 mg/day) was as effective as non-liposomal CBD (50 mg/day) Safety - Hematoct, comprehensive metabolic profile, and clinical chemistry indicated no significant detrimental impact of CBD administration over the 4-week analysis period.
Deabold et al., 2019 Single-dose pharmacokinetics and preliminary safety assessment with use of CBD-rich hemp nutraceutical in healthy dogs and cats	n=8, feline	Safety and pharmacokinetics	RCT	CBD oil 2mg/kg Twice daily for 12 weeks	N/A	One of the 8 study cats developed a mild to moderate, persistent increase in ALT whilst receiving CBD oil. Cats showed more frequent adverse events including excessive licking and head shaking in 35% and 25% of dose administrations, respectively. Other adverse events included pacing, chewing, gagging, vomiting, salivating, jumping and grunting.
Kulpa et al., 2021 Safety and tolerability of escalating cannabinoid doses in healthy cats	n=20, feline	Safety and pharmacokinetics	RCT	CBD oil (30.5 mg/kg) THC oil (41.5 mg/kg) CBD:THC oil (13:18.4 mg/kg) (plus 2 placebo groups)	N/A This is the first feline study to explore the safety + tolerability of CBD and THC, alone and in combination, in a controlled research setting.	All observed adverse events (AEs) were mild, transient and resolved without medical intervention. Gastrointestinal AEs were more common with formulations containing MCT. Constitutional (lethargy, hypothermia), neurologic (ataxia) and ocular (protrusion membranae nictitans) AEs were more common with oils containing THC (CBD/THC and THC oils). Higher plasma levels of the cannabinoids and their metabolites following administration of the CBD/THC combination product are suggestive of a pharmacokinetic interaction.
McIver et al., 2020 Safety of topical treatment of cannabidiol extract in a unique manuka honey carrier on second intention wound healing on equine distal limb wounds: a preliminary study	n=6, equine	Efficacy	RCT	1% CBD in manuka honey (or saline placebo) Topical application 42 days	No difference in wound size, daily healing rate and total time to healing.	This preliminary study failed to demonstrate any difference in wound healing variables between treatment groups. This was unexpected due to the established effects of UMF 20 manuka honey on wound healing using the same model. This may be due to systemic effects of cannabidiol and study design. Further research into the use of cannabidiol in equine wounds is warranted.