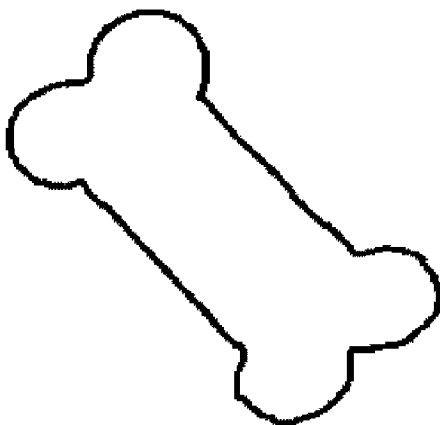




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(57) **Abrégé/Abstract:**

A cannabinoid (CBD) and methylsulfonylmethane (MSM) formulation for ameliorating the symptoms of one or more of Autoimmune diseases, muscle and joint inflammation and pain, and psychological disorders such as; anxiety, fear, and panic in canines, The method of administration is an oral chewable supplement. Other ingredients within the chewable will help with internal dissemination of the CBD and MSM, and give added nutrients to the canine in a pleasant formulation.

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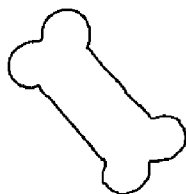
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FIG. 1



(57) Abstract: A cannabinoid (CBD) and methylsulfonylmethane (MSM) formulation for ameliorating the symptoms of one or more of Autoimmune diseases, muscle and joint inflammation and pain, and psychological disorders such as; anxiety, fear, and panic in canines. The method of administration is an oral chewable supplement. Other ingredients within the chewable will help with internal dissemination of the CBD and MSM, and give added nutrients to the canine in a pleasant formulation.



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DIETARY SUPPLEMENT COMPOSITIONS

FIELD OF THE INVENTION

[0001] The present invention is generally directed to a dietary supplement composition, and more particularly a chewable composition that includes one or more of each of cannabinoids, organosulfur compounds, medium-chain triglycerides, and colloidal silver in a suitable edible carrier.

BACKGROUND OF THE INVENTION

[0002] Due to the playful, energetic, and even hard-working nature of domestic animals, specifically dogs, joint and muscle conditions are often very common. Throughout a pet's life, the pet owners want them to live the best quality of life available. Unfortunately, some pets develop autoimmune diseases that owners would like to help ease or minimize the symptoms of. Dogs suffering from the symptoms of these diseases and conditions are often uncomfortable and in severe pain.

[0003] Pets may have behavioral conditions as result of a plethora of causes. Dogs suffering from anxiety or fear can become aggressive with people and other animals. Depending on the severity of aggression, owners can face litigation and the dog can be euthanized. Dogs may suffer from separation anxiety which may lead to them destroying the owner's house or belongings. This is stressful to the owner but may also stress the dog when disappointing their owner or being punished. Mild fears over loud noises or strange unknowns to the dog may cause the dog to bark constantly or even hide. The constant barking can be an annoyance to the owner, and the noises cause unnecessary stress to the dog. Even hyperactive or overly excitable dogs cause problems for owners and themselves. The constant running, barking, and seeking attention can irritate owners, and lead to them giving the dog away.

[0004] Currently pet owners must make difficult decisions to end their beloved dog's life due to pain from conditions and diseases that their dog is suffering from. While there are current medications that help with treatment of diseases, they will not increase the quality of life for the dogs. Surgeries to help a dog may be too expensive for the owners. Steroids, harsh pain medication, and supplements may not work at all or may decrease in effectiveness over time. These issues lead to premature euthanasia decisions for pet owners.

[0005] Harsh pain killers and anti-inflammatory drugs called Non-steroidal Anti-Inflammatory

Drugs (NSAID) can have severe effects on the dogs. While they may stop the pain, or help minimize the inflammation they can cause the dog to have reactions such as: not eating or eating less, lethargy, depression, changes in behavior, vomiting, diarrhea, black tarry-colored stool, yellowing of gums, skin, or the whites of the eyes, change in drinking, and changes in skin such as scabs, redness, or scratching. Most of these symptoms are poor quality of life for dogs.

SUMMARY OF THE INVENTION

[0006] The summary is provided to introduce a selection of concepts in a simplified form that are further described below in the detailed description of the invention. This summary is not intended to identify key features of the claimed subject matter, nor is it intended to be used as an aid in determining the scope of the claimed subject matter.

[0007] The compositions hereof are characterized, in various embodiments, as comprising one or more of each of cannabinoids, organosulfur compounds, medium-chain triglycerides, and colloidal silver in a suitable edible carrier.

[0008] In an exemplary embodiment, a dietary supplement composition including one or more cannabinoids, one or more organosulfur compounds, one or more medium-chain triglycerides, colloidal silver, and an edible carrier.

[0009] In an exemplary embodiment, a method of administering a cannabinoid to a canine includes orally administering a cannabinoid composition to a canine. The cannabinoid composition comprises includes one or more cannabinoids, one or more organosulfur compounds, one or more medium-chain triglycerides, colloidal silver, and an edible carrier.

[0010] In an exemplary embodiment, dietary supplement composition includes cannabidiol (CBD), the organosulfur compound methylsulfonylmethane (MSM), one or more medium-chain triglycerides (MCTs), and colloidal silver in a suitable edible carrier. According to the exemplary embodiment, the composition is provided in an edible biscuit form. In some embodiments, the compositions include ginger. In certain embodiments, the edible biscuit is formulated as a pet, or more particularly, a dog biscuit, and comprises in addition to the foregoing listed components peanut butter, flour, baking powder, and lactose free milk. In some particular embodiments, the compositions may further include one or more flavorings, proteins selected from animal and vegetable derived proteins, and any one or more fruits, vegetables and meats and combinations of these. In some examples, the compositions include one or more of blueberry, pumpkin, sweet

potato, turkey, fish, venison, lamb and beef.

[0011] Other features and advantages of the present invention will be apparent from the following more detailed description, taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

[0012] This disclosure describes exemplary embodiments in accordance with the general inventive concepts and is not intended to limit the scope of the invention in any way. Indeed, the invention as described in the specification is broader than and unlimited by the exemplary embodiments set forth herein, and the terms used herein have their full ordinary meaning.

[0013] Other features and advantages of the present invention will be apparent from the following more detailed description, taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 shows a CBD and MSM enriched oral chewable animal supplement, according to an embodiment.

[0015] FIG. 2 shows a flowchart illustrating a method of making a cannabinoid and MSM enriched oral chewable dog supplement, according to an embodiment.

FIG. 3 shows data related to a study with the supplement, identified as Appendix Table 1: Study Cohort.

FIG. 4 shows data related to a study with the supplement identified as Appendix Table 2: Study Cohort Intake Data.

FIG. 5 shows data related to a study with the supplement, identified as Appendix Table 3: Study Cohort Intake Data Continued.

FIG. 6 shows data related to a study with the supplement, identified as Appendix Table 4: Study Cohort Intake Data Continued.

FIG. 7 shows data related to a study with the supplement, identified as Appendix Table 5: Study Cohort Conclusion Data.

FIG. 8 shows data related to a study with the supplement, identified as Appendix Table 6: Study Cohort Conclusion Data Continued.

FIG. 9 shows data related to a study with the supplement, identified as Appendix Table 7: Study Cohort Summary Symptom Data (by dog, by date).

[0016] Wherever possible, the same reference numbers will be used throughout the drawings to represent the same parts.

DETAILED DESCRIPTION OF THE INVENTION

[0017] The present invention combines CBD and MSM in an oral chewable drug in the form of a treat/biscuit. The composition provides a positive result for autoimmune stimulation, anxiety relief, as well as pain and inflammation relief on bone and joint pain. The invention was originally designed to provide relief for pain and anxiety, the unexpected result was an autoimmune stimulation. The composition also provides the unexpected feature of extended shelf stability as compared to other edible compositions, the stability owing to the combination of at least the MCT component, and in particular in the presence of ginger.

[0018] Cannabis is becoming more widely used within human medicine. It is yet to be recognized as a good option in veterinary medicine. Cannabidiol (CBD) is a cannabinoid with high therapeutic potential without psychoactive effects; unlike Tetrahydrocannabinol (THC), the psychoactive lipid in the cannabis plant. THC has high toxicity potential in animals due to their heightened Endocannabinoid System, which absorbs the lipid causing neurological toxicity. CBD does not cause any psychoactive effects and is not known to be toxic to canines.

[0019] The present invention is an oral, chewable drug that uses the combination of cannabidiol (CBD) and Methylsulfonylmethane (MSM) to ameliorate (one or more of help prevent, treat, delay, and ease) the symptoms of one or more of symptoms in dogs with autoimmune diseases, muscle and joint conditions causing inflammation and pain, and psychological behaviors from anxiety and fear.

[0020] Without being bound by theory, the inventors have formulated the compositions with the aim that the CBD will interact with the animal's Endocannabinoid System (ES), which binds to Cannabinoid receptors within the animal's body to help maintain physiological homeostasis. It is further believed that MSM will affect the flexibility and permeability of cell walls to enable fluids to pass through cell tissues more easily.

[0021] The foregoing ingredients work in concert with bio-active Silver Hydrosol to help promote the healing of internal illnesses and discomfort. The combination of the three agents together are designed to interact with the animal's body to help manage and ameliorate the symptoms of autoimmune diseases, muscle and joint inflammation and pain, and psychological conditions,

including anxiety.

[0022] It is further believed that CBD, MSM, and Silver Hydrosol synergistically interact to assist the body in achieving homeostasis. It is believed by the inventors that CBD attaches to the Endocannabinoid System's receptors, MSM aids in the absorption of the CBD, and Silver Hydrosol by the cells thus benefiting the healing process.

CANNABINOIDS

[0023] In the various embodiments, the dietary supplement includes one or more cannabinoid compounds. According to the various embodiments, the cannabinoids may include any extract, such as an oil from any of cannabis plants. CBD, for example, is obtained from Industrial Hemp plants via extraction using CO₂ and/or ethanol extraction processes. Generally, cannabinoid means and refers to one cannabinoid or a mixture of cannabinoids, cannabinoid isolates, or any other isolated and purified cannabinoid, terpene, or biomolecule product by the genus Cannabis plant, for example, cannabidiol (CBD). Cannabidiol (CBD), cannabigerol (CBG), cannabinol (CBN), cannabichromene (CBC), and other cannabinoids are sourced from industrial hemp plants with THC levels below 0.3 weight percent. Cannabinoids are extracted from the flower material using ethanol extraction and/or CO₂ extraction methods. Cannabinoids may then be refined and further processed to an isolate having high purity. The cannabinoid isolate(s) used are approximately 98 – 99% pure.

[0024] In accordance with the various embodiments, the amount of one or more cannabinoids present in the composition can range from about 0.5 weight percent to about 3 weight percent, and in some embodiments from about 0.5 weight percent to about 2.5 weight percent, and in some embodiments from about 1 weight percent to about 3 weight percent or any suitable combination, sub-combination, range, or sub-range thereof by weight, based on the weight of the composition. In some embodiments according to the disclosure, the composition includes at least about 0.5% of the one or more cannabinoid. Thus, in some embodiments, the at least one cannabinoid is present in an amount that is not less than about 0.5%, based upon the total weight of the composition. In some embodiments, two or more cannabinoids may be present.

[0025] Thus, one or a combination of cannabinoids may be present, by weight, based on the total weight of the composition, from about 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.5, 2.0, to about 2.5 weight percent, including increments and ranges therein and there between.

MEDIUM-CHAIN TRIGLYCERIDES (MCTs)

[0026] In the various embodiments, the dietary supplement includes one or more medium-chain triglycerides compounds. Medium-chain triglycerides (MCTs) are triglycerides with two or three fatty acids and an aliphatic tail of from 6 to 12 carbon atoms (medium-chain fatty acids). Sources for commercial extraction of MCTs include palm kernel oil and coconut oil. The lipids in MCTs include caproic acid (C6, also known as hexanoic acid), caprylic acid (C8, octanoic acid), capric acid (C10, decanoic acid), and lauric acid (C12, dodecanoic acid).

[0027] In accordance with the various embodiments, the amount of one or more MCTs present in the composition can range from about 2.5 to about 5.0% or any suitable combination, sub-combination, range, or sub-range thereof by weight, based on the weight of the composition. In some embodiments, the composition includes at least about 2.5% of the one or more MCT. Thus, in some embodiments, the one or more MCT is present in an amount that is not less than about 2.5%, based upon the total weight of the composition. In some embodiments, two or more MCTs are present.

[0028] Thus, one or a combination of MCTs may be present, by weight, based on the total weight of the composition, from about 2.5, 3.0, 3.5, 4.0, 4.5 to about 5.0 weight percent, including increments and ranges therein and there between.

COLLOIDAL SILVER

[0029] In the various embodiments, the dietary supplement includes one or more silver containing compounds. Silver hydrosol, also known as colloidal silver, is silver particles suspended in a liquid. In accordance with the various embodiments, the amount of silver hydrosol present in the composition may result in dosages of less than about 5 micrograms per kilogram ($\mu\text{g/kg}$) per day.

ORGANOSULFUR COMPOUNDS

[0030] In the various embodiments, the dietary supplement includes one or more organosulfur compounds. Methylsulfonylmethane (MSM) is an organosulfur compound with the formula $(\text{CH}_3)_2\text{SO}_2$. It is closely related to dimethyl sulfoxide (DMSO). Raw material source of MSM is provided at a concentration of 100%.

[0031] In accordance with the various embodiments, the amount of one or more organosulfur compounds present in the composition can range from about 0.75 weight percent to about 2 weight

percent or any suitable combination, sub-combination, range, or sub-range thereof by weight, based on the weight of the composition. In some embodiments according to the disclosure, the composition includes at least about 0.75 weight percent of the one or more organosulfur compound. Thus, in some embodiments, the at least one organosulfur compound is present in an amount that is not less than about 0.75 weight percent, based upon the total weight of the composition. In some embodiments, two or more organosulfur compounds are present.

[0032] Thus, one or a combination of organosulfur compounds may be present, by weight, based on the total weight of the composition, may be about 0.75, about 1.0, about 1.25, about 1.5, and/or about 1.75, to about 2.0 weight percent, including increments and ranges therein and there between. In some embodiments, the organosulfur compounds may be present, per dose, of about 75 milligrams to about 100 milligrams.

GINGER

[0033] **[0034]** In the various embodiments, the dietary supplement includes ginger. Ginger is a plant with leafy stems and yellow-ish green flowers. Ginger root extract is commonly used for relief of various types of stomach problems. Ginger contains various active ingredients, such as gingerenone A, zingerone, shogaols, paradol, gingerol, and 1-dehydro-10-gingerdione, that may reduce nausea and inflammation. Ginger has also been used for centuries as a natural food preservative.

[0034] In accordance with the various embodiments, one or a combination of ginger compounds may be present. In some embodiments, the total weight of ginger compounds by weight, based on the total weight of the composition, may be about 0.5, about 1.0, and/or about 1.25, to about 1.5 weight percent based on the total weight of the composition, including increments and ranges therein and there between.

OTHER INGREDIENTS

[0035] In the various embodiments, the dietary supplement includes one or more additional ingredients, which may include milk or lactose free milk, peanut butter, flour, baking powder, oils and other food-based ingredients, flavorings and actives. Lactose-free milk is generally known as milk-based product that includes milk (reduced fat, low-fat, or fat-free depending on other forms), lactase enzyme, Vitamin A, and Vitamin D. In alternate embodiments, the composition may

comprise alternate milk forms, including lactose containing forms. Yet other components that may be added to the compositions are selected from any suitable edible material, including but not limited to one or more flavorings, proteins selected from animal and vegetable derived proteins, and any one or more fruits, vegetables and meats and combinations of these. In some examples, the compositions include one or more of blueberry, pumpkin, sweet potato, turkey, fish, venison, lamb and beef.

EXAMPLE COMPOSITION:

[0036] The cannabinoid enriched oral chewable drug (FIG 1) is comprised of CBD isolate, MSM, Silver Hydrosol (colloidal silver), Organic Peanut Butter, Flour, Baking Powder, Ginger, MCT oil, and lactose free milk (such as Lactaid™ Milk).

[0037] In the example of FIG. 2, a cannabinoid enriched oral chewable composition is prepared. The cannabinoid enriched oral chewable composition may be the same or different from the cannabinoid enriched oral chewable composition of FIG. 1. At block 101, the dry ingredients are mixed in a first bowl or mixer. At block 102, the liquid ingredients are mixed in a second bowl or mixer. At block 103, the dry ingredients and the liquid ingredients are combined and blended to a substantially uniform composition. At block 104, the combined mixtures are molded into a desired shape. At block 105, the combined mixture is baked to produce the cannabinoid enriched oral chewable composition. In some embodiments, the combined mixture may be baked at a temperature of about 225 degrees Fahrenheit for a time of about 25 minutes.

[0038] An example cannabinoid enriched oral chewable composition which may be prepared by the method of FIG. 2 is shown below in Table 1.

[0039] Table 1

Dry Ingredients	Liquid Ingredients (Final vol 1 cup)
128 mg CBD isolate	15 drops of Silver Hydrosol
9 grams MSM	4 tbsp. MCT oil
2 cups of Whole meal Flour	270 g. Organic peanut butter
1 tbsp. Baking powder	Balance of cup Lactaid Milk
1 tsp. Ginger	

[0040] The materials of Table 1 were prepared as a cannabinoid enriched oral chewable composition by the following steps. The dry ingredients were combined and mixed together to ensure even distribution of CBD and MSM. Organic peanut butter was then added to the dry mixture. The MCT palm oil, Lactaid Milk, and Silver Hydrosol were combined in a separate bowl to form a liquid mixture. The liquid mixture was poured into the bowl with dry mixture and organic peanut butter and mixed together. The resulting dough was rolled out to a desired thickness for molding. The composition was molded and checked for correct weight, about 6 to about 9 grams per chewable supplement. An oven was preheated to 225 degrees Fahrenheit and the molded composition was baked on trays for 25 minutes and cooled thoroughly.

[0041] Other flavors can be added to the cannabinoid enriched oral chewable supplement such as using chicken or lamb flavoring or even fruit or vegetable flavors to provide variety in the dog's diet. Changing the amount CBD, MSM, or Silver Hydrosol can change the makeup of FIG. 1. It is believed that the CBD, MSM, and Silver Hydrosol work in conjunction with the animal's Endocannabinoid System and cellular structure by being absorbed in the small intestine through the continued enzyme break down of food and absorption by villi on the lining of intestinal wall.

[0042] The articles "a" and "an," as used herein, mean one or more when applied to any feature in embodiments of the present invention described in the specification and claims. The use of "a" and "an" does not limit the meaning to a single feature unless such a limit is specifically stated. The article "the" preceding singular or plural nouns or noun phrases denotes a particular specified feature or particular specified features and may have a singular or plural connotation depending upon the context in which it is used. The adjective "any" means one, some, or all indiscriminately of whatever quantity.

[0043] "At least one," as used herein, means one or more and thus includes individual components as well as mixtures/combinations.

[0044] The transitional terms "comprising", "consisting essentially of" and "consisting of", when used in the appended claims, in original and amended form, define the claim scope with respect to what unrecited additional claim elements or steps, if any, are excluded from the scope of the claim(s). The term "comprising" is intended to be inclusive or open-ended and does not exclude any additional, unrecited element, method, step or material. The term "consisting of" excludes any element, step or material other than those specified in the claim and, in the latter instance, impurities ordinary associated with the specified material(s). The term "consisting essentially of"

limits the scope of a claim to the specified elements, steps or material(s) and those that do not materially affect the basic and novel characteristic(s) of the claimed invention. All materials and methods described herein that embody the present invention can, in alternate embodiments, be more specifically defined by any of the transitional terms “comprising,” “consisting essentially of,” and “consisting of.”

[0045] Other than in the operating examples, or where otherwise indicated, all numbers expressing quantities of ingredients and/or reaction conditions are to be understood as being modified in all instances by the term “about,” meaning within 10% of the indicated number (e.g. “about 10%” means 9% – 11% and “about 2%” means 1.8% - 2.2%).

[0046] All percentages and ratios are calculated by weight unless otherwise indicated. All percentages are calculated based on the total composition unless otherwise indicated. Generally, unless otherwise expressly stated herein, “weight” or “amount” as used herein with respect to the percent amount of an ingredient refers to the amount of the raw material comprising the ingredient, wherein the raw material may be described herein to comprise less than and up to 100% activity of the ingredient. Therefore, weight percent of an active in a composition is represented as the amount of raw material containing the active that is used, and may or may not reflect the final percentage of the active, wherein the final percentage of the active is dependent on the weight percent of active in the raw material.

[0047] All ranges and amounts given herein are intended to include subranges and amounts using any disclosed point as an end point. Thus, a range of “1% to 10%, such as 2% to 8%, such as 3% to 5%,” is intended to encompass ranges of “1% to 8%,” “1% to 5%,” “2% to 10%,” and so on. All numbers, amounts, ranges, etc., are intended to be modified by the term “about,” whether or not so expressly stated. Similarly, a range given of “about 1% to 10%” is intended to have the term “about” modifying both the 1% and the 10% endpoints. Further, it is understood that when an amount of a component is given, it is intended to signify the amount of the active material unless otherwise specifically stated.

[0048] Notwithstanding that the numerical ranges and parameters setting forth the broad scope of the disclosure are approximations, unless otherwise indicated the numerical values set forth in the specific examples are reported as precisely as possible. Any numerical value, however, inherently contains certain errors necessarily resulting from the standard deviation found in their respective testing measurements. The example that follows serves to illustrate embodiments of the present

disclosure without, however, being limiting in nature.

[0049] While the invention has been described with reference to a preferred embodiment, it will be understood by those skilled in the art that various changes may be made, and equivalents may be substituted for elements thereof without departing from the scope of the invention. In addition, many modifications may be made to adapt a particular situation or material to the teachings of the invention without departing from the essential scope thereof. Therefore, it is intended that the invention is not limited to the particular embodiment disclosed as the best mode contemplated for carrying out this invention, but that the invention will include all embodiments falling within the scope of the appended claims.

[0050] While the invention has been described with reference to one or more embodiments, it will be understood by those skilled in the art that various changes may be made, and equivalents may be substituted for elements thereof without departing from the scope of the invention. In addition, many modifications may be made to adapt a particular situation or material to the teachings of the invention without departing from the essential scope thereof. Therefore, it is intended that the invention is not limited to the particular embodiment disclosed as the best mode contemplated for carrying out this invention, but that the invention will include all embodiments falling within the scope of the appended claims. In addition, all numerical values identified in the detailed description shall be interpreted as though the precise and approximate values are both expressly identified.

EXAMPLES: STUDY

[0051] The cannabinoid enriched oral chewable composition was then feed to various canines exhibiting various symptoms. The number of treats and thus the dosage of cannabinoids are based on weight of the dog, approximately one treat per 20 lbs. is the recommended dose. In some embodiments, the CBD is present at a dosage of about 0.66 milligrams per 20 pounds (0.03 mg/lb) (0.073 mg/kg). In some embodiments, the dosage may be increased or decreased by about 0.05 milligrams (mg) per treat. In some embodiments, the dosage may vary between about 0.067 mg/kg and 0.078 mg/kg. The frequency can be determined by the severity of disease, disorder, or condition of the dog.

EXAMPLES: STUDY DATA APPENDIX

[0052] The following study data appendix includes data tables 1- 7 (shown in FIG 3 – FIG 9) which provide information about the cohort of dogs enrolled in the study, including breed, age, weight, health and behaviour issues and observations. (Severity Score means: 1 = NONE, 10 = EXTREMELY SEVERE).

Claims

What is claimed is:

1. A dietary supplement composition comprising:
 - one or more cannabinoids;
 - one or more organosulfur compounds;
 - one or more medium-chain triglycerides;
 - colloidal silver; and
 - an edible carrierwherein the composition is provided in an edible biscuit form comprising dry and liquid ingredients.
2. The dietary supplement composition of claim 1, further comprising ginger and comprising one or more ingredients selected from the group consisting of flavorings, animal derived proteins, vegetable derived proteins, fruits, vegetables, meats, and combinations of these.
3. The dietary supplement composition of claim 2 wherein the composition demonstrates a shelf life characterized as having a shelf life increase up to an additional 5-6 weeks without refrigeration as compared with compositions lacking at least one or both medium-chain triglycerides and ginger.
4. The dietary supplement composition of claim 1, wherein the composition is prepared from a mixture comprising dry ingredients comprising the one or more cannabinoids, the one or more organosulfur compounds, whole meal flour, baking powder, and ginger, and liquid ingredients comprising the colloidal silver compound comprising Silver Hydrosol, the medium-chain triglycerides, palm oil, milk, and peanut butter.
5. The dietary supplement composition of claim 1, wherein the one or more cannabinoids comprises cannabidiol present in an amount of about 0.5 weight percent to about 3 weight percent, based on the total weight of the dietary supplement composition and the one or more organosulfur compounds comprises methylsulfonylmethane.

6. The dietary supplement composition of claim 5, further comprising ginger and comprising one or more ingredients selected from the group consisting of flavorings, animal derived proteins, vegetable derived proteins, fruits, vegetables, meats, and combinations of these.
7. A method of administering a cannabinoid to a canine comprising:
 - orally administering a cannabinoid composition to a canine;
 - wherein the cannabinoid composition comprises,
 - one or more cannabinoids;
 - one or more organosulfur compounds;
 - one or more medium-chain triglycerides;
 - colloidal silver; and
 - an edible carrier
 - wherein the composition is provided in an edible biscuit form comprising dry and liquid ingredients.
8. The method of claim 7, wherein the one or more cannabinoids includes cannabidiol (CBD).
9. The method of claim 8, wherein the CBD is present in an amount of about 0.5 weight percent to about 3 weight percent, based on the total weight of the dietary supplement composition.
10. The method of claim 8, wherein the one or more organosulfur compounds includes methylsulfonylmethane (MSM).
11. The method of claim 8, wherein the edible carrier includes ginger.
12. The method of claim 8, wherein the amount of cannabidiol administered to the canine in a 24-hour period is between 0.134 milligrams per kilogram of the canine and 0.157 milligrams per kilogram of the canine.

1/25

FIG. 1

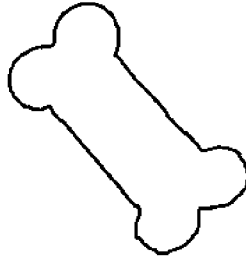


FIG. 2

Start

Dry Ingredients
101

Liquid Ingredients
102

Combine Mixtures
103

Mold Desired Shape
104

Bake 225°F, 25 minutes
105

End

2/25

PET	BREED	AGE (years unless other given)	WEIGHT	SERVING SIZE (# OF TREATS)
Rudy	Schipperchie/Chihuahua Mix	8	9	0.5
Mayson	Chuwinni	7	14	1
Sasha	Yorkie/Poodle	10	15	1
Taco	Chug/Chihuahua/Pug	5	15	1
Nala	Shitzu	14	16	1
Buzz	Cockapoo	7	20	1
Huey	Jack Russel Beagle	5	20	1
Tara	Pekingese	12	20	1
Buddy	Rat Terrier	9	25	1
Luca	Golden Doodle	2	26	1.5
Rascal	Schnauzer Mix		30	1.5
Eddie	French Bulldog	2	30	1.5
Roxy	Staffordshire Terrier/ Mountain Cur Mix	5	40	2
Chanel East Coast	Micro Staffordshire Terrier	9 months	42	2
Scout	Mixed, Hound	1 .5	45	2
Stella	Husky	1	45	2
Scrappy	Staffordshire Terrier	10.7	58	3
Dee	Golden Retriever	6	60	3
Diezle	Staffordshire Terrier	5	60	3
Lady	Black Mouth Cur	4	60	3
Maverick	Staffordshire Terrier	6	60	3
Ollie	Golden Retriever	3	65	3
Melo	American Bulldog	1.5	65	3
Princess	Staffordshire Terrier/Boxer	9	75	3
Blaze	Staffordshire Terrier	3	80	4
Chloe	Staffordshire Terrier		80	4
Dutch	American Bulldog	1.5	97	4
Leo	Boxer/ Staffordshire Terrier	3	100	4
Razor	White Sheppard		120	4

FIG 3

3/25

NAME	DOG BREED	WEIGHT (pounds)	DOG AGE (years/other)	TIMESTAMP	SEVERITY OF SYMPTOMS	CURRENT MEDICATIONS	AILMENT(S)
Luca	Goldendoodle	26	2	2019/09/24 3:44:27	7	Gabapentin, fluoxetine	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Dutch	American Bulldog	97	1 1/2	2019/09/24 3:52:01	5	Not on any meds currently.	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Melo	American Bulldog	65	1 1/2	2019/09/24 3:53:16	5	No meds currently	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Coco	Shepherd/Hound Mix	45	2	2019/09/24 3:58:08	2		Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Tara	Pekingese	20	12	2019/09/24 4:18:59	6		Muscle & Joint Condition causing Inflammation and/or Pain
Stella	Husky	45	1	2019/09/24 4:21:17	8		Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Scrappy	Pitbull	58	10.7	2019/09/24 5:30:59	10	None	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Eddie	French bulldog	30	2	2019/09/24 5:34:03	8	None	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Scout	Hound mix	45	1.5	2019/09/24 6:07:16	5	none	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Blaze	Pitt bull	80	3	2019/09/24 7:15:44	7	None at this time	Psychological Behaviors from anxiety, social anxiety, panic and/or fear

FIG 4

4/25

NAME	DOG BREED	WEIGHT (pounds)	DOG AGE (years/other)	TIMESTAMP	SEVERITY OF SYMPTOMS	CURRENT MEDICATIONS	AILMENT(S)
Buddy	Rat terrier	25	9	2019/09/24 7:21:53	5		Muscle & Joint Condition causing Inflammation and/or Pain
Mayson	Chewinni	14	7	2019/09/24 7:28:00	5		Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Princess	Pit bull/ boxer	75	9	2019/09/24 7:29:10	6	Prednisone & Benadryl	Muscle & Joint Condition causing Inflammation and/or Pain
Roxy	Pitbull Terrier/Mountain Cur	40	5	2019/09/24 7:58:07	7		Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Dee	Golden Retriever	60	6	2019/09/24 8:00:55	9		Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Chanel East Coast	Micro Pitt Bull	42	9 months	2019/09/24 9:22:14		Skin allergies	None
Taco	Chug (Chihuahua and Pug)	15	5	2019/09/24 9:25:06	8		Muscle & Joint Condition causing Inflammation and/or Pain
Diezle	Pitt Bull	60	5	2019/09/24 9:26:56	7	Urinary issues	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Ollie	Golden Retriever	65	3	2019/09/25 9:02:19 AM AST			None
Nala	shih tzu	16	14	2019/09/25 9:06:13 AM AST	6		Muscle & Joint Condition causing Inflammation and/or Pain

FIG 4 cont

5/25

NAME	DOG BREED	WEIGHT (pounds)	DOG AGE (years/other)	TIMESTAMP	SEVERITY OF SYMPTOMS	CURRENT MEDICATIONS	AILMENT(S)
Buzz	Cockapoo	20	7	2019/09/25 10:25:27 AM AST		none	None
Sasha	Yorkie-Po	15	10	2019/09/25 11:17:19 AM AST	9		Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Leo	Boxer Pit	100	3	2019/09/25 11:24:38 AM AST	9		Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Rudy	Schipperchie / Chihuahua mic	9	8	2019/09/25 5:11:54	7	None	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Rascal	wire hair terrier/ schnauzer	32	8	2019/09/26 12:09:27	9	n/a	Muscle & Joint Condition causing Inflammation and/or Pain
Razor	German Shephard	120	9	2019/09/26 12:14:24	9	arthritis	Muscle & Joint Condition causing Inflammation and/or Pain
Lady	Black Mouth Cur	60	est 4	2019/09/27 1:58:41	7	anxiety	Psychological Behaviors from anxiety, social anxiety, panic and/or fear
Huey	Jack Russel Beagle	20	est 5	2019/09/27 2:00:21	10	anxiety	Psychological Behaviors from anxiety, social anxiety, panic and/or fear

FIG 4 cont

6/25

DOG NAME	WHICH, IF ANY, OF THE FOLLOWING BEHAVIORAL PROBLEMS DOES YOUR DOG EXHIBIT? (CHECK ALL THAT APPLY)	HAS YOUR PET EXPERIENCED SEIZURES?	IF YES, HOW MANY AND HOW OFTEN?	ANXIETY, SEPARATION ANXIETY, PANIC OR FEAR?
Luca	Excessive Drooling; Panting; Excessive Barking; Pacing; Restlessness	No		Yes
Dutch	Aggression; Excessive Drooling; Excessive Barking; Pacing	Yes	He had cluster seizures for approximately 1 month earlier this year.	Yes
Melo	Urinating/Defecating; Restlessness	No		Yes
Coco	whimpering, excessive licking	No		Yes
Tara	Panting	No		Yes
Stella	Urinating/Defecating; Panting; Excessive Barking; Destructive Behavior	No		Yes
Scrappy	Urinating/Defecating; Panting; Destructive Behavior; Pacing; Restlessness	No		Yes
Eddie	Excessive Barking; Excessive jumping when people enter the house.	No		Yes
Scout	She hides when vacuum is on. When taken for car rides she cries when someone leaves the car (i.e. school drop-off, dropping a kid at a friend's house). She can't be crated because she cries, shakes and excessively drools.	No		Yes
Blaze	Aggression; Panting; Excessive Barking; Destructive Behavior	Yes	About 4 and first time 2 minutes and others, 25 to 10 seconds	Yes
Buddy	Urinating/Defecating; Excessive Barking; Restlessness	No		Maybe

FIG 5

7/25

DOG NAME	WHICH, IF ANY, OF THE FOLLOWING BEHAVIORAL PROBLEMS DOES YOUR DOG EXHIBIT? (CHECK ALL THAT APPLY)	HAS YOUR PET EXPERIENCED SEIZURES?	IF YES, HOW MANY AND HOW OFTEN?	ANXIETY, SEPARATION ANXIETY, PANIC OR FEAR?
Mayson	Urinating/Defecating; cannot be left alone for an entire work day without crying and won't eat unless I am here	No		Yes
Princess	Pacing; Restlessness	No		No
Roxy	Excessive Barking; Restlessness	No		Yes
Dee	Panting; Pacing; Restlessness; Follows us around until we sit down	No		No
Chanel East Coast		No		
Taco	Aggression; Urinating/Defecating; Destructive Behavior	No		Yes
Diezle	Restlessness	No		Yes
Ollie		No		
Nala	Aggression; Urinating/Defecating; Excessive Barking	Yes	several times a day	No
Buzz		Yes	5 to 6 per month over last 3 years	
Sasha	Excessive Barking; Pacing	No		Yes
Leo	Aggression; Excessive Barking; Repetitive/Compulsive Behaviors (i.e. biting, spinning, chewing on body part)	No		Yes
Rudy	Aggression; Excessive Barking	No		Maybe
Rascall	Aggression; Panting; eating	No		Yes
Razor	unable to run fast, limping after running	No		No
Lady	Excessive Barking	No		Yes

FIG 5 cont

8/25

DOG NAME	WHICH, IF ANY, OF THE FOLLOWING BEHAVIORAL PROBLEMS DOES YOUR DOG EXHIBIT? (CHECK ALL THAT APPLY)	HAS YOUR PET EXPERIENCED SEIZURES?	IF YES, HOW MANY AND HOW OFTEN?	ANXIETY, SEPARATION ANXIETY, PANIC OR FEAR?
Huey	Urinating/Defecating; Excessive Drooling; Panting; Excessive Barking; Destructive Behavior	No		Yes

FIG 5 cont

9/25

DOG NAME	DIAGNOSED W MUSCLE OR JOINT CONDITION?	IF YES, PLEASE LIST THE CONDITION	IS YOUR DOG IN PAIN?	IF YES, WHERE?	DOES YOUR DOG SHOW OTHER SYMPTOMS?	IF YES, PLEASE LIST	SEVERITY OF SYMPTOMS.	ANYTHING ELSE WE SHOULD KNOW?	IF YES, PLEASE EXPLAIN
Luca								No	
Dutch								No	
Melo								No	
Coco								No	
Tara	Yes	Arthritis	Yes	Front and Hind Legs, Hips	Yes	Sleeps a lot	7	Yes	She has a hard time standing up after sitting sometimes and she staggers
Stella								No	
Scrappy								No	
Eddie								No	
Scout								No	
Blaze								No	
Buddy			Maybe	Legs	No		4	No	
Mayson								No	
Princess	No		Maybe		Yes	Limping	5	Yes	She has a history of cancer. She has numerous mast cell tumors removed over the

FIG 6

10/25

DOG NAME	DIAGNOSED W MUSCLE OR JOINT CONDITION?	IF YES, PLEASE LIST THE CONDITION	IS YOUR DOG IN PAIN?	IF YES, WHERE?	DOES YOUR DOG SHOW OTHER SYMPTOMS?	IF YES, PLEASE LIST	SEVERITY OF SYMPTOMS.	ANYTHING ELSE WE SHOULD KNOW?	IF YES, PLEASE EXPLAIN
									past few to treat it.
Roxy								No	
Dee								No	
Chanel East Coast								No	
Taco	No		No		Yes	ANXIETY	5	No	
Diezle								No	
Ollie								No	
Nala	Yes	hip dysplasia	Yes	Mainly in the hips	Yes	constant shaking, tumors.	7	No	
Buzz								No	
Sasha								No	
Leo								Yes	Dry skin
Rudy								No	
Rascall	Yes	arthritis	Maybe	rear legs	Yes	pain after running, yelps if hind	10	No	

FIG 6 cont

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11/25

DOG NAME	DIAGNOSED W/ MUSCLE OR JOINT CONDITION?	IF YES, PLEASE LIST THE CONDITION	IS YOUR DOG IN PAIN?	IF YES, WHERE?	DOES YOUR DOG SHOW OTHER SYMPTOMS?	IF YES, PLEASE LIST	SEVERITY OF SYMPTOMS.	ANYTHING ELSE WE SHOULD KNOW?	IF YES, PLEASE EXPLAIN
						quarters pivot			
Razor	No	hip dysplasia	Maybe	rear quarter	No		5	No	
Lady								Yes	eats a raw diet
Huey								Yes	eats a raw diet

FIG 6 cont

12/25

DOG NAME	TIMESTAMP	DOES DOG LIKE THE TREATS?	GIVEN 2 X PER DAY?	WHAT SYMPTOM(S) IS YOUR DOG DEALING WITH?
Blaze	2019/10/08 11:07:35	Yes	Yes	Aggression, separation anxiety. Severe anxiety.
Blaze	2019/10/27 7:33:32	Yes	Yes	Aggressive, anxiety
Buddy	2019/10/08 11:10:08	Yes	Yes	Anxiety, arthritis
Buddy	2019/10/27 7:37:04	Yes	Yes	Arthritis and old.
Chanel	2019/10/09 1:00:41	Yes	Yes	Anxiety and severe allergies
Dee	2019/10/07 1:44:30	Yes	Yes	Separation Anxiety, Nervousness
Dee Donovan	2019/10/21 9:11:24	Yes	Yes	Separation anxiety, skittish
Diezle	2019/10/09 12:59:48	Yes	Yes	Anxiety and nervousness
Dutch	2019/10/07 1:33:38	Yes	No	Two treats make him too drowsy so we're only giving one; He seems to have less anxiety
Eddie	2019/10/03 9:22:32	Yes	Yes	Eddie gets crazy when anyone comes to the house- way too hyperactive and jumps like crazy.
Eddie	2019/10/10 2:56:43	Yes	Yes	Over excitement
Eddie	2019/10/17 7:14:27	Yes	Yes	Overexcited
Eddie	2019/10/05 4:10:41	Yes	Yes	Eddie gets over excited when people come over- jumps incessantly.
Eddie	2019/10/08 10:02:48	Yes	Yes	Excessive jumping when people come over, overexcited
Eddie	2019/10/22 1:37:28	Yes	Yes	Over excitement
Frankie DiArcangelo Puller	2019/10/07 6:16:44	Yes	Yes	anxiety
Huey	2019/10/03 7:45:56	Yes	Yes	barking at leaves falling
Huey	2019/10/06 6:17:19	Yes	Not always	barking and separation anxiety
Huey	2019/10/09 6:36:19	Yes	No	anxiety
Huey	2019/10/11 8:29:21	Yes	Not always	anxiety

FIG 7

13/25

DOG NAME	TIMESTAMP	DOES DOG LIKE THE TREATS?	GIVEN 2 X PER DAY?	WHAT SYMPTOM(S) IS YOUR DOG DEALING WITH?
Huey	2019/10/15 2:52:01	Yes	Yes	Quite frankly he is a spaz that barks his head off when we have visitors, he also has severe separation anxiety
Lady	2019/10/03 7:46:33	Yes	Yes	Extreme barking at activity outside
Lady	2019/10/06 6:19:55	Yes	Not always	anxiety
Lady	2019/10/09 6:32:09	Yes	No	anxiety
Lady	2019/10/11 8:28:46	Yes	Not always	anxiety
Lady	2019/10/15 2:50:31	Yes	Yes	She has anxiety (I think) and freaks out when anything is outside or on our property
Leo	2019/10/03 7:34:58	Yes	Yes	Anxiety and hip problem and barking
Luca	2019/10/07 1:50:10	Yes	Yes	Anxiety
Maverick	2019/10/08 1:07:52	Not Sure	Not always	Apprehension from gun shots/thunder. Some Hip discomfort
Maverick	2019/10/10 5:09:29	Yes	Yes	anxiety and Hip/joint issues
Maverick	2019/10/16 5:17:07	Yes	Yes	Anxiety/Rear hip and knee soreness
Maverick	2019/10/16 5:17:15	Yes	Yes	Anxiety/Rear hip and knee soreness
Maverick	2019/10/16 5:24:44	Yes	Yes	Anxiety/Sore hips/knee
Maverick	2019/10/16 5:31:50	Yes	Not always	Anxiety/Hip/knee soreness
Maverick	2019/10/22 10:29:54	Yes	Yes	Anxiety(7) hip/joint (3)
Maverick	2019/10/22 10:40:36	Yes	Yes	Anxiety(7) hip/joint soreness (3)
Maverick	2019/10/31 4:25:15	Yes	Yes	Anxiety Hip/joint soreness
Maverick	2019/10/31 4:28:27	Yes	Yes	Anxiety Hip/Joint soreness
Maverick	2019/10/31 4:33:53	Yes	Yes	Anxiety Hip/Joint
Mayson	2019/10/08 11:11:58	Yes	Yes	Anxiety
Mayson	2019/10/08 11:30:38	Yes	Yes	Anxiety
Mayson	2019/10/27 7:38:49	Yes	Not always	Anxious

FIG 7 cpnt

14/25

DOG NAME	TIMESTAMP	DOES DOG LIKE THE TREATS?	GIVEN 2 X PER DAY?	WHAT SYMPTOM(S) IS YOUR DOG DEALING WITH?
Melo	2019/10/07 1:34:22	Yes	No	Melo was dealing with some back-leg pain; Seems to have gotten better
Nala	2019/10/08 4:12:12	Not Sure	Yes	Seizures.
polly puller	2019/10/07 6:23:11	Yes	Yes	anxiety
Princess	2019/10/09 11:52:29	Yes	Yes	Joint pain/ limping
Princess	2019/10/20 11:39:12	Yes	Yes	Join pain/limping
Princess	2019/10/06 10:21:47	Yes	Yes	Pain/limping
Princess	2019/10/13 8:49:23	Yes	Yes	Limping/joint pain
Razor and Rascal	2019/10/08 3:10:46	Yes	Yes	slowed down, doesn't chase the UPS truck anymore
Roxy	2019/10/07 1:43:42	Yes	Yes	Anxiety, Barking
Roxy Donovan	2019/10/21 9:12:47	Yes	Yes	Barking, anxiety
Sasha	2019/10/03 7:30:46	Yes	Yes	Anxiety and constant barking
Scout	2019/10/03 7:54:04	Yes	Yes	anxiety
Scout	2019/10/05 6:00:42	Yes	Yes	anxiety
Scout	2019/10/08 10:19:39	Yes	Yes	Anxiety
Scout	2019/10/16 5:57:41	Yes	Yes	anxiety
Scrappy	2019/10/03 9:19:42	Yes	Yes	Anxiety
Scrappy	2019/10/05 4:08:44	Yes	Yes	Anxiety
Scrappy	2019/10/08 10:00:53	Yes	Yes	Anxiety
Scrappy	2019/10/10 2:54:31	Yes	Yes	Anxiety
Scrappy	2019/10/17 7:11:58	Yes	Yes	Anxiety- hates loud noises.
Scrappy	2019/10/22 1:35:59	Yes	Yes	Anxiety
Stella	2019/10/07 1:44:24	Not Sure	Not always	Anxiety
Taco	2019/10/09 12:59:16	Yes	Yes	Anxiety

FIG 7 cont

15/25

DOG NAME	TIMESTAMP	DOES DOG LIKE THE TREATS?	GIVEN 2 X PER DAY?	WHAT SYMPTOM(S) IS YOUR DOG DEALING WITH?
Tara	2019/10/16 10:07:35	Yes	Yes	Arthritis, inflammation
Tara	2019/10/16 10:14:55	Yes	Yes	Arthritis & inflammation
Tara	2019/10/16 10:18:02	Yes	Yes	Arthritis, inflammation
Tara	2019/10/20 4:58:41	Yes	Yes	Arthritis & Inflammation

FIG 7 cont

16/25

DOG NAME	TIMESTAMP	SEVERITY OF SYMPTOMS	OTHER COMMENTS
Blaze	2019/10/08 11:07:35	8	I think he needs stronger
Blaze	2019/10/27 7:33:32	8	They are helping somewhat. He goes to sleep. He is calmer when they kick in.
Buddy	2019/10/08 11:10:08	5	With repetition, will feel much better
Buddy	2019/10/27 7:37:04	7	They do relax him. He is older and thy have to be broke up for him to eat. Maybe you can make them in a softer form.
Chanel	2019/10/09 1:00:41	10	
Dee	2019/10/07 1:44:30	5	
Dee Donovan	2019/10/21 9:11:24	5	
Diezle	2019/10/09 12:59:48	10	
Dutch	2019/10/07 1:33:38	2	
Eddie	2019/10/03 9:22:32	8	Eddie loves the treats. He also seems to be more calm after an hour or so after given his treat (i.e. laying down). Will know more after continuing use of treats.
Eddie	2019/10/10 2:56:43	7	Eddie loves the treats. He will be tested this weekend when people are over to see if the treats have any effect on his over excitement. He seems ok though, just chills and sleeps throughout the day.
Eddie	2019/10/17 7:14:27	5	Eddie loves the treats! He seems to be more calm.
Eddie	2019/10/05 4:10:41	8	Eddie loves the treats-hard to tell if they are working but he does seem to tire out and relax after taking the treats temporarily.
Eddie	2019/10/08 10:02:48	1	Eddie loves the treats- seems to mellow out shortly after taking them. I have not had people over so have not really gotten to see what he's like with the jumping etc.
Eddie	2019/10/22 1:37:28	1	Eddie still loves these treats. He seems more mellow- not really jumping as much and sleep most of the day with his buddy, Scrappy.
Frankie DiArcangelo Puller	2019/10/07 6:16:44	8	

FIG 8

17/25

DOG NAME	TIMESTAMP	SEVERITY OF SYMPTOMS	OTHER COMMENTS
Huey	2019/10/03 7:45:56	7	
Huey	2019/10/06 6:17:19	8	Treats calm him from barking for extended periods with guests in the house.
Huey	2019/10/09 6:36:19	8	
Huey	2019/10/11 8:29:21	7	making a point to do two treats a day now instead of spot treating issues with cookies.
Huey	2019/10/15 2:52:01	7	Same comment as for Lady, I didn't even have to put him in a different room than the chimney sweep. He calmed down after about 5 min of them being in the house
Lady	2019/10/03 7:46:33	8	
Lady	2019/10/06 6:19:55	7	No treats in the morning but gave a treat around 4 pm in anticipation of guests. She calmed quickly but was still very playful and running around in the yard.
Lady	2019/10/09 6:32:09	8	Seems to work well at home, still highly stressed when out in public
Lady	2019/10/11 8:28:46	8	making a point to do two treats a day now instead of spot treating issues with cookies.
Lady	2019/10/15 2:50:31	5	Today we had a chimney sweep in the house and tree trimmers outside, Lady did fantastic and only barked a few times when they showed up. It seems the effectiveness wears off after 4-5 hours or so
Leo	2019/10/03 7:34:58	6	
Luca	2019/10/07 1:50:10	5	
Maverick	2019/10/08 1:07:52	2	My Dog is 60 lbs and 3 treats was very close to too much for him. That is, sedating him to the degree which he didn't like it anymore. I'd made the mistake previously with a very strong CBD oil during a thunderstorm. He no longer likes coconut. Given how...laid out(very technical term) he was yesterday, the evening dose was skipped. We began today with 2 treats, and his response is more what's expected behaviorally. Also, regarding Current severity of symptom's, his fear response from sound is about a 7, the hips are 2-3.

FIG 8 cont

18/25

DOG NAME	TIMESTAMP	SEVERITY OF SYMPTOMS	OTHER COMMENTS
Maverick	2019/10/10 5:09:29	3	Switching to 2 each treats, twice per day has resulted in Maverick being on a more even keel with regard to normal daily behavior. I would say he's even a bit more tolerant. We recently agree to foster a Frenchie and they played as I've never seen him do before. He was both relaxed and patient, while being highly stimulated by the other dog, who is quite the little fireball. A bit of context, Maverick is a rescue from a fight ring, so any sort of rough housing(with other dogs), wasn't really thought to be something we could expect from him. Words fail me with regard to how great it feels to be wrong in that assumption. Presently, (likely) due to it being the end of summer his hips are doing pretty well. It would be worth mentioning, the additional activity due to the foster pup, hasn't slowed him down at all despite a few hard wood floor wipe outs.
Maverick	2019/10/16 5:17:07	3	Mav has adjusted well to the daily treats and looks forward to them. He continues to have above average exercise days and still shows no obvious soreness or limping(The limping is rare but does occur sometimes). His disposition with his new buddy, the French bulldog, progresses very well. They continue to rough house while being in control. She appears to be testing him, but his keel remains steady.
Maverick	2019/10/16 5:17:15	3	Mav has adjusted well to the daily treats and looks forward to them. He continues to have above average exercise days and still shows no obvious soreness or limping(The limping is rare but does occur sometimes). His disposition with his new buddy, the French bulldog, progresses very well. They continue to rough house while being in control. She appears to be testing him, but his keel remains steady.
Maverick	2019/10/16 5:24:44	3	Today was a good test. A neighbor was taking target practice. Maverick hates and is scared of gun shots. It was quiet as we went outside for late morning business and as we hit the back length of the garage a few shots rang out, then continued for about a minute. Instead of heading back towards the house, with shaking soon to follow, he ran out in front of his new comrade barking and blocking her back towards the house. After we got back inside the shaking hit but didn't last long. All together a great experience despite having to endure target practice nearby.

FIG 8 cont

19/25

DOG NAME	TIMESTAMP	SEVERITY OF SYMPTOMS	OTHER COMMENTS
Maverick	2019/10/16 5:31:50	3	Today it rained for hours, one of Mavericks least favorite things. Just behind gunshots and thunder. Sometimes, mostly because I think he believes the rains is foreshadowing thunder. As the rain began, he started to quiver slightly, fortunately it was time for his treats. The quivering quickly subsided and hasn't returned through the duration of the storms. He seems less troubled by them. Not thrilled, but no signs of bunkering down in his established safe areas.
Maverick	2019/10/22 10:29:54	2	Thursday's storm gave us an opportunity to try giving an extra boost to combat anxiety. It worked pretty well. After the howling winds kicked up in the evening an extra treat was given, bringing his consumption to three for the evening. It took about 15~ minutes but the tremors passed and didn't return for the duration of the evening.
Maverick	2019/10/22 10:40:36	3	Things have been relatively normal lately. He continues to have more exercise per day, without showing signs of increased soreness in his hind quarters, which is great. Overall temperament has been steady and even keeled throughout the day of normal play with our new Frenchie(a 20lbs tornado of marbles). She continues to break down his barriers, engaging in rough housing and generally razzing him and he has responded with kind and gentlemanly behavior.
Maverick	2019/10/31 4:25:15	3	Mav continues to do well, weathering storms and gunshots the best he ever has. Mobility and overall agility is good with no real signs of soreness despite a much higher activity level. One thing to not is he has begun drooling. Its small but becoming a regular thing.
Maverick	2019/10/31 4:28:27	3	Mav's doing well. Solid temperament. Good agility etc. The drooling continues. It hasn't gotten worse, but about 85% of the time he has a 3" stringer hanging. Apart from that everything is great.
Maverick	2019/10/31 4:33:53	3	Mav's anxiety continues to do well. We had strong rains again today, something which usually evokes at least minor trembling. Nothing today! No visible signs of soreness despite high humidity and cooler temperatures. The drool string has become a regular thing. No increase or decrease in time/volume.
Mayson	2019/10/08 11:11:58	5	With repetition, will feel much better
Mayson	2019/10/08 11:30:38	5	With repetition, will feel much better

FIG 8 cont

20/25

DOG NAME	TIMESTAMP	SEVERITY OF SYMPTOMS	OTHER COMMENTS
Mayson	2019/10/27 7:38:49	7	They do relax him. He is older and thy have to be broke up for him to eat. Maybe you can make them in a softer form.
Melo	2019/10/07 1:34:22	1	
Nala	2019/10/08 4:12:12	3	At 14, we were considering putting our dog down soon, but she seems to have found her second wind. Seizures have disappeared and our dog seems alert and happy.
polly puller	2019/10/07 6:23:11	8	
Princess	2019/10/09 11:52:29	4	Princess seems to be feeling better. Her limping is getting a little less and she's not been grunting when going to lay down or get up as loudly. She also wanted to walk further than usual. She did not have treats this morning as we were all out.
Princess	2019/10/20 11:39:12	3	The treats really seem to be helping her. With the higher dose she had loose stools in the beginning. Seems to be back to normal
Princess	2019/10/06 10:21:47	5	Princess has been getting 3 treats twice a day. Seems to love the treats. I can see a slight difference in her limping. I feel like they may be helping.
Princess	2019/10/13 8:49:23	4	She has been getting around a lot better. She was able to just on my bed for the first time in months.
Razor and Rascal	2019/10/08 3:10:46	5	Two dogs: Razor white German shepherd , Rascal schnauzer terrier mix
Roxy	2019/10/07 1:43:42	5	Barking seems to have gone down a little. She typically gets very overwhelmed by seeing new dogs but did great yesterday at a play date.
Roxy Donovan	2019/10/21 9:12:47	4	
Sasha	2019/10/03 7:30:46	6	
Scout	2019/10/03 7:54:04	5	This is the second day she has been on the treats. I noticed a much different reaction to her in the carline drop off this morning. She usually whines and cries and panics when the kids get out of the car. This morning, there was no whining or crying, just some pacing.

FIG 8 cont

21/25

DOG NAME	TIMESTAMP	SEVERITY OF SYMPTOMS	OTHER COMMENTS
Scout	2019/10/05 6:00:42	4	She enjoys the treats and looks forward to them. I do notice a slight calming in her after treats are given, lasting maybe an hour.
Scout	2019/10/08 10:19:39	4	Scout really enjoys these treats. They provide a mild dose of mellowing for a short period of time.
Scout	2019/10/16 5:57:41	4	This second round of treats seems to have a more calming effect on her. She is noticeably calmer 20 minutes after eating.
Scrappy	2019/10/03 9:19:42	8	Scrappy loves these treats. He's picky about certain foods/treats but he really enjoys these. He seems to be more calm after about an hour or so after the treats. Will know more after continuing use of the treats.
Scrappy	2019/10/05 4:08:44	8	Scrappy loves the treats. Seems to work temporarily so far. Hard to tell but will know as time goes on.
Scrappy	2019/10/08 10:00:53	8	Scrappy loves the treats and will mellow out a little shortly after taking them but he is still anxious- doesn't like loud noises and will pace. Scrappy hates balloons _ TM and boxes _ TM _. Last night my kid brought a balloon into the house and scrappy started to pack, going up and down the stairs, floor to floor, hiding.
Scrappy	2019/10/10 2:54:31	7	Scrappy LOVES these treats, so much so that I can often find him aggressively waiting in the kitchen next to where his treats are wagging his tail. He seems ok- still cannot tell.
Scrappy	2019/10/17 7:11:58	4	Scrappy loves these treats. Last night there was loud rain and some thunder which would normally send Scrappy into a panic (pacing, digging under the bed, carpets etc..) but he did not express any of that and just laid there. I am hoping it was from the treats.
Scrappy	2019/10/22 1:35:59	1	Scrappy still loves these treats. He seems more relaxed but still gets anxious over loud noises. He naps most of the day with his buddy Eddie.
Stella	2019/10/07 1:44:24	6	We give them to her twice a day, but she doesn't always eat them I'm not sure if she loves the flavor. I definitely saw a slight calming effect when she ingested them
Taco	2019/10/09 12:59:16	10	

FIG 8 cont

22/25

DOG NAME	TIMESTAMP	SEVERITY OF SYMPTOMS	OTHER COMMENTS
Tara	2019/10/16 10:07:35	7	She really likes the treats!! Has shown more improvement since taking the treats. Has more energy and much more playful!!
Tara	2019/10/16 10:14:55	8	I was first concerned about the size of the treats and if she would like them, but I broke them apart and she really like likes them! I have noticed more balance in her walking and more pep in her as well! Very satisfied!!
Tara	2019/10/16 10:18:02	7	She is running a little bit and seems to have more energy...balance is good!!
Tara	2019/10/20 4:58:41	4	She LOVES these treats!! How can I get more of them for her? Low anxiety, sleeps calmly? I only received 2 boxes of treats so far.

FIG 8 cont

23/25

DATE	DOG NAME	BREED	WEIGHT	AGE	CURRENT SEVERITY OF SYMPTOM(S)?
10/8/2019	Blaze	Pitt Bull	80	3	8
10/15/2019	Blaze				8
9/24/2019	Buddy	Rat Terrier	25	9	4
10/8/2019	Buddy				5
10/15/2019	Buddy				7
10/9/2019	Chanel				10
10/7/2019	Dee	Golden Retriever	60	6	5
10/21/2019	Dee Donovan				5
10/9/2019	Diezle	Pitt Bull	60	5	10
10/7/2019	Dutch				2
10/5/2019	Eddie	French Bulldog	30	2	8
10/8/2019	Eddie				1
10/22/2019	Eddie				1
10/3/2019	Eddie				8
10/10/2019	Eddie				7
10/17/2019	Eddie				5
10/7/2019	Frankie DiArcangelo Puller				8
10/4/2019	Huey	Jack Russel Beagle	20	est 5	7
10/5/2019	Huey				8
10/9/2019	Huey				8
10/10/2019	Huey				7
10/15/2019	Huey				7
10/4/2019	Lady	Black Mouth Cur	60	est 4	8
10/5/2019	Lady				7
10/9/2019	Lady				8

FIG 9

24/25

DATE	DOG NAME	BREED	WEIGHT	AGE	CURRENT SEVERITY OF SYMPTOM(S)?
10/10/2019	Lady				8
10/15/2019	Lady				5
10/3/2019	Leo	Boxer Pit	100	3	6
10/7/2019	Luca	Goldendoodle	26	2	5
10/8/2019	Maverick				2
10/10/2019	Maverick				3
10/12/2019	Maverick				3
10/12/2019	Maverick				3
10/14/2019	Maverick				3
10/16/2019	Maverick				3
10/12/2019	Maverick				2
10/13/2019	Maverick				3
10/27/2019	Maverick				3
10/29/2019	Maverick				3
10/31/2019	Maverick				3
10/8/2019	Mayson	Chewinni	14	7	5
10/8/2019	Mayson				5
10/15/2019	Mayson				7
10/7/2019	Melo	American Bulldog	65	1 1/2	1
9/24/2019	Nala	Shih Tzu	16	14	7
10/8/2019	Nala				3
10/7/2019	Polly puller				8
9/24/2019	Princess	Pit Bull/ Boxer	75	9	5
10/6/2019	Princess				5
10/13/2019	Princess				4
10/9/2019	Princess				4
10/21/2019	Princess				3

FIG 9 cont

25/25

DATE	DOG NAME	BREED	WEIGHT	AGE	CURRENT SEVERITY OF SYMPTOM(S)?
9/24/2019	Rascall	Wire Hair Terrier/ Schnauzer	32	8	10
10/8/2019	Rascall				5
9/24/2019	Razor	German Shephard	120	9	5
10/8/2019	Razor				5
10/7/2019	Roxy	Pitbull Terrier/Mountain Cur	40	5	5
10/21/2019	Roxy Donovan				4
10/3/2019	Sasha	Yorkie-Po	15	10	6
10/3/2019	Scout	Hound Mix	45	1.5	5
10/5/2019	Scout				4
10/8/2019	Scout				4
10/16/2019	Scout				4
10/3/2019	Scrappy	Pitbull	58	10.7	8
10/5/2019	Scrappy				8
10/8/2019	Scrappy				8
10/10/2019	Scrappy				7
10/17/2019	Scrappy				4
10/22/2019	Scrappy				1
10/7/2019	Stella	Husky	45	1	6
9/24/2019	Taco	Chug (Chihuahua And Pug)	15	5	5
10/9/2019	Taco				10
9/24/2019	Tara	Pekingese	20	12	7
10/16/2019	Tara				7
10/10/2019	Tara				8
10/13/2019	Tara				7
10/20/2019	Tara				4

FIG 9 cont

