CLAIMS

1. A pharmaceutical composition comprising hemp extract and a carrier, wherein the hemp extract comprises:

cannabidiol; and

cannabidiolic acid;

wherein the ratio of cannabidiol to cannabidiolic acid is about 0.6:1 to about 1:0.6, and

wherein the carrier comprises biopolymer NF-971P and/or lecithin.

2. A pharmaceutical composition ~~comprising hemp extract and a carrier~~according to claim 1, wherein the hemp extract additionally comprises:

~~cannabidiol;~~

~~cannabidiolic acid;~~

cannabigerolic acid;

Δ9-tetrahydrocannabinol; and

cannabichromene~~.~~;

~~wherein the ratio of cannabidiol to cannabidiolic acid is about 0.6:1 to about 1:0.6, and wherein the carrier comprises biopolymer NF-971P and/or lecithin.~~, optionally

~~3. The pharmaceutical composition of claim 1 or 2,~~ wherein the hemp extract further comprises:

α-pinene;

β-myrcene;

β-pinene;

δ-limonene;

linalool;

β-caryophyllene;

α-humulene;

nerolidol 2;

guaiol;

caryophyllene oxide; and

α-bisabolol~~.~~, and/or

~~4. The pharmaceutical composition of claim 2 or 3,~~ wherein the concentration of Δ9-tetrahydrocannabinol is insufficient to produce a psychotropic effect~~.~~, and/or

5. The pharmaceutical composition of any one of claims 2-4, wherein the ratio of Δ9-tetrahydrocannabinol to the other cannabinoids is about 1:25,; and/or

6. The pharmaceutical composition of any one of claims 2-5, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 1 mg/mL,; and/or

7. The pharmaceutical composition of any one of claims 2-6, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.5 mg/mL,; and/or

8. The pharmaceutical composition of any one of claims 2-7, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.3 mg/mL,; and/or

9. The pharmaceutical composition of any one of claims 2-8, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.2 mg/mL,; and/or

10. The pharmaceutical composition of any one of claims 2-9, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.1 mg/mL,; and/or

11. The pharmaceutical composition of any one of claims 2-10, wherein the concentration of Δ9-tetrahydrocannabinol is about 0 mg/mL,; and/or

12. The pharmaceutical composition of any one of claims 2-11, wherein the hemp extract comprises:

about 1-10 mg/mL of cannabidiol;

about 1-10 mg/mL of cannabidiolic acid;

about 0.05-0.2 mg/mL cannabigerolic acid;

about 0.1-0.3 mg/mL Δ9-tetrahydrocannabinol; and

about 0.1-0.4 mg/mL cannabichromene., optionally

13. The pharmaceutical composition of claim 12, wherein the hemp extract comprises:

about 5 mg/mL of cannabidiol;

about 5 mg/mL of cannabidiolic acid;

about 0.11 mg/mL cannabigerolic acid;

about 0.25 mg/mL Δ9-tetrahydrocannabinol; and

about 0.27 mg/mL cannabichromene.

~~14~~3. The pharmaceutical composition of ~~any of one claims~~claim 1~~-13~~ or 2, wherein the hemp extract comprises:

about 0.09-0.13% α-pinene;

about 0.23-0.44% β-myrcene;

about 0.04-0.09% β-pinene;

about 0.05-0.09% δ-limonene;

about 0.03-0.06% linalool;

about 0.04-0.07% β-caryophyllene;

about 0.02-0.04% α-humulene;

about 0.04-0.07% nerolidol 2;

about 0.02-0.04% guaiol;

about 0.04-0.08% caryophyllene oxide; and

about 0.01-0.04% α-bisabolol~~.~~, optionally

~~15. The pharmaceutical composition of claim 14,~~ wherein the hemp extract further comprises:

camphene;

β-ocimene;

eucalyptol;

isopulegol; and/or

nerolidol 1~~.~~, further optionally,

~~16. The pharmaceutical composition of claim 15,~~ wherein the hemp extract comprises:

about 0.02% camphene;

about 0.02-0.03% β-ocimene;

about 0.02-0.05% eucalyptol;

about 0.02% isopulegol; and/or

about 0.02-0.04% nerolidol 1.

~~17~~4. The pharmaceutical composition of any one of claims 1-~~16~~3, wherein the composition is formulated in a carrier~~.~~, optionally

~~18. The pharmaceutical composition of claim 17,~~ wherein the carrier is selected from the group consisting of linseed oil, olive oil, fish oil, salmon oil, coconut oil, catnip oil, sesame oil, MCT oil, and grapeseed oil~~.~~, further optionally

~~19. The pharmaceutical composition of claim 18,~~ wherein the carrier is grapeseed oil~~.~~ or

~~20. The pharmaceutical composition of claim 18, wherein the carrier is~~ catnip oil.

5~~21~~. The pharmaceutical composition of any one of claims 1-4~~20~~, wherein the composition comprises lecithin~~.~~, optionally

~~22. The pharmaceutical composition of claim 21,~~ wherein the lecithin is sunflower lecithin~~.~~, further optionally

~~23. The pharmaceutical composition of claim 22,~~ wherein the sunflower lecithin is up to 40%.

~~24~~6. The pharmaceutical composition of any one of claims 1-~~23~~5, wherein the composition further comprises NF-971P~~.~~, optionally

~~25. The pharmaceutical composition of claim 24,~~ wherein the NF-971P is up to 2% weight/volume ratio.

~~26. A pharmaceutical composition comprising hemp extract and a carrier, wherein the hemp extract comprises:~~

~~α-pinene;~~
~~β-myrcene;~~
~~β-pinene;~~
~~δ-limonene;~~
~~linalool;~~
~~β-caryophyllene;~~
~~α-humulene;~~
~~nerolidol 2;~~
~~guaiol;~~
~~caryophyllene oxide; and~~

α-bisabolol and

one of biopolymer NF-971P and/or lecithin.

27. The pharmaceutical composition of claim 26, wherein the hemp extract comprises:

about 0.09-0.13% α-pinene;

about 0.23-0.44% β-myrcene;

about 0.04-0.09% β-pinene;

about 0.05-0.09% δ-limonene;

about 0.03-0.06% linalool;

about 0.04-0.07% β-caryophyllene;

about 0.02-0.04% α-humulene;

about 0.04-0.07% nerolidol 2;

about 0.02-0.04% guaiol;

about 0.04-0.08% caryophyllene oxide; and

about 0.01-0.04% α-bisabolol.

28. The pharmaceutical composition of claim 27, wherein the hemp extract further comprises:

camphene;

β-ocimene;

eucalyptol;

isopulegol; and/or

nerolidol 1.

29. The pharmaceutical composition of claim 28, wherein the hemp extract comprises:

about 0.02% camphene;

about 0.02-0.03% β-ocimene;

about 0.02-0.05% eucalyptol;

about 0.02% isopulegol; and/or

about 0.02-0.04% nerolidol 1.

30. The pharmaceutical composition of any one of claims 26-29, wherein the composition is formulated in a carrier.

~~31. The pharmaceutical composition of claim 30, wherein the carrier is selected from the group consisting of linseed oil, olive oil, fish oil, salmon oil, coconut oil, catnip oil, sesame oil, MCT oil, and grapeseed oil.~~

~~32. The pharmaceutical composition of claim 31, wherein the carrier is grapeseed oil.~~

~~33. The pharmaceutical composition of claim 31, wherein the carrier is catnip oil.~~

~~34. The pharmaceutical composition of any one of claims 26-33, wherein the composition comprises lecithin.~~

~~35. The pharmaceutical composition of claim 34, wherein the lecithin is sunflower lecithin.~~

~~36. The pharmaceutical composition of claim 35, wherein the sunflower lecithin is up to 40%.~~

~~37. The pharmaceutical composition of any one of claims 26-36, wherein the composition comprises NF-971P.~~

~~38. The pharmaceutical composition of claim 37, wherein the NF-971P is up to 2% weight/volume ratio.~~

7~~39~~. A pharmaceutical composition according to claim 1, wherein ~~comprising hemp extract and a carrier, wherein~~ the hemp extract further comprises:

~~cannabidiol;~~

~~cannabidiolic acid;~~

cannabigerolic acid;

Δ9-tetrahydrocannabinol; and

cannabichromene;

wherein the carrier comprises grapeseed oil and one of biopolymer NF-971P and lecithin~~.~~, optionally

~~40. The pharmaceutical composition of claim 39, wherein the ratio of cannabidiol to cannabidiolic acid is selected from the group consisting of about 1:100, about 1:50, about 1:10, and about 1:1.~~

~~41. The pharmaceutical composition of claim 39 or 40, wherein the ratio of cannabidiol to cannabidiolic acid is about 1:1.~~

~~42. The pharmaceutical composition of any one of claims 39-41,~~ wherein the concentration of Δ9-tetrahydrocannabinol is insufficient to produce a psychotropic effect~~.~~ and/or

~~43. The pharmaceutical composition of any one of claims 39-42,~~ wherein the ratio of Δ9-tetrahydrocannabinol to the other cannabinoids is about 1:25~~.~~, and/or

~~44. The pharmaceutical composition of any one of claims 39-43,~~ wherein the concentration of Δ9-tetrahydrocannabinol is less than about 1 mg/mL~~.~~, and/or

~~45. The pharmaceutical composition of any one of claims 39-44,~~ wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.5 mg/mL~~.~~, and/or

~~46. The pharmaceutical composition of any one of claims 39-45,~~ wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.3 mg/mL~~.~~, and/or

~~47. The pharmaceutical composition of any one of claims 39-46,~~ wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.2 mg/mL~~.~~, and/or

~~48. The pharmaceutical composition of any one of claims 39-47,~~ wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.1 mg/mL~~.~~, and/or

~~49. The pharmaceutical composition of any one of claims 39-48,~~ wherein the concentration of Δ9-tetrahydrocannabinol is about 0 mg/mL~~.~~, and/or

~~50. The pharmaceutical composition of any one of claims 39-49,~~ wherein the hemp extract comprises:

about 1-10 mg/mL of cannabidiol;

about 1-10 mg/mL of cannabidiolic acid;

about 0.05-0.2 mg/mL cannabigerolic acid;
about 0.1-0.3 mg/mL Δ9-tetrahydrocannabinol; and
about 0.1-0.4 mg/mL cannabichromene~~.~~, optionally

~~51. The pharmaceutical composition of claim 50,~~ wherein the hemp extract comprises:
about 5 mg/mL of cannabidiol;
about 5 mg/mL of cannabidiolic acid;
about 0.11 mg/mL cannabigerolic acid;
about 0.25 mg/mL Δ9-tetrahydrocannabinol; and
about 0.27 mg/mL cannabichromene~~.~~, and/or

~~52. The pharmaceutical composition of any one of claims 39-51,~~ wherein the hemp extract comprises:
α-pinene;
β-myrcene;
β-pinene;
δ-limonene;
linalool;
β-caryophyllene;
α-humulene;
nerolidol 2;
guaiol;
caryophyllene oxide; and
α-bisabolol~~.~~, optionally

~~53. The pharmaceutical composition of claim 52,~~ wherein the hemp extract comprises:
about 0.09-0.13% α-pinene;
about 0.23-0.44% β-myrcene;
about 0.04-0.09% β-pinene;
about 0.05-0.09% δ-limonene;
about 0.03-0.06% linalool;
about 0.04-0.07% β-caryophyllene;
about 0.02-0.04% α-humulene;
about 0.04-0.07% nerolidol 2;

about 0.02-0.04% guaiol;
about 0.04-0.08% caryophyllene oxide; and
about 0.01-0.04% α-bisabolol~~.~~, and/or

~~54. The pharmaceutical composition of claim 52 or 53,~~ wherein the hemp extract further comprises:
camphene;
β-ocimene;
eucalyptol;
isopulegol; and/or
nerolidol 1~~.~~, optionally

~~55. The pharmaceutical composition of claim 54,~~ wherein the hemp extract comprises:
about 0.02% camphene;
about 0.02-0.03% β-ocimene;
about 0.02-0.05% eucalyptol;
about 0.02% isopulegol; and/or
about 0.02-0.04% nerolidol 1.

8~~56~~. A dosage form comprising any of the pharmaceutical compositions of any one of claims 1-7~~55~~ and one or more pharmaceutically acceptable additives, flavoring agents, surfactants, and adjuvants.

9~~57~~. The dosage form of claim 8~~56~~, wherein the flavoring agent is selected from the group consisting of peppermint oil, mango extract, beef, poultry, and seafood~~.~~, or

~~58. The dosage form of claim 56,~~ formulated as a sublingual spray~~.~~, or

~~59. The dosage form of claim 56,~~ formulated as a water or alcohol soluble solution, or a cream for transdermal application~~.~~, or

~~60. The dosage form of claim 56,~~ formulated as a gel for buccal or mucosal administration~~.~~, or

~~61. The dosage form of claim 56,~~ formulated as a powder~~.~~, or

62. The dosage form of claim 56, formulated as a solution for subcutaneous injection., or

63. The dosage form of claim 56, formulated as a tablet., or

64. The dosage form of claim 56, formulated as a capsule., or

65. The dosage form of claim 56, formulated as a hard chewable. or

66. The dosage form of claim 56, formulated as a soft chewable. or

67. The dosage form of claim 56, wherein the composition is formulated for administration using a nebulizer., or

68. The dosage form of claim 56, wherein the composition is formulated for administration using a pet collar., or

69. The dosage of claim 56, wherein the composition is formulated as a chew for oral administration., optionally

70. The dosage form of claim 69, where the chew is produced using cold extrusion., further optionally

71. The dosage form of claim 70, wherein the weight of the chew is about 0.5-10 g., further optionally

72. The dosage form of claim 71, wherein the weight of the chew is about 4 g, about 6 g, about 9 g, or about 10 g., further optionally

73. The dosage form of claim 72, wherein the weight of the chew is about 4 g., further optionally

74. The dosage form of claim 73, wherein the chew comprises:

about 7 mg of cannabidiol;

about 6 mg of cannabidiolic acid;

about 0.12 mg cannabigerolic acid;
about 0.32 mg Δ9-tetrahydrocannabinol; and
about 0.36 mg cannabichromene.

1075. The dosage form of claim 856, formulated in a carrier for oral administration., optionally

76. The dosage form of claim 75, wherein the carrier is selected from the group consisting of linseed oil, olive oil, fish oil, salmon oil, coconut oil, catnip oil, sesame oil, MCT oil, and grapeseed oil. , further optionally

77. The dosage form of claim 76, wherein the carrier is grapeseed oil., or

78. The dosage form of claim 76, wherein the carrier is catnip oil.

1179. The dosage form of claim 856, formulated for inhalation.

80. A dosage form comprising:
glucosamine HCl;
chondroitin sulfate (76%);
brewer's yeast;
arabic gum;
guar gum;
a flavoring agent;
Verdilox;
Previon;
hemp extract;
glycerin;
sunflower lecithin; and
water.

81. The dosage form of claim 80, comprising:
about 12-17% glucosamine HCl;
about 1-4% chondroitin sulfate (76%);
about 29-33% brewer's yeast;
about 3-6% arabic gum;

~~about 0.5-2% guar gum;~~

~~about 12-16% of a flavoring agent;~~

~~about 0.01-0.1% Verdilox;~~

~~about 0.5-1.5% Previon;~~

~~about 3-6% hemp extract;~~

~~about 13-17% glycerin;~~

~~about 3-7% sunflower lecithin; and~~

~~about 3-7% water.~~

~~82. The dosage form of claim 80 or 81, comprising:~~

~~about 15.6% glucosamine HCl;~~

~~about 2.6% chondroitin sulfate (76%);~~

~~about 30% brewer's yeast;~~

~~about 4.7% arabic gum;~~

~~about 0.9% guar gum;~~

~~about 14.2% of a flavoring agent;~~

~~about 0.05% Verdilox;~~

~~about 0.9% Previon;~~

~~about 4.7% hemp extract;~~

~~about 15.1% glycerin;~~

~~about 5.7% sunflower lecithin; and~~

~~about 5.7% water.~~

~~83. A dosage form comprising:~~

~~glucosamine HCl;~~

~~hyaluronic acid;~~

~~brewer's yeast;~~

~~arabic gum;~~

~~guar gum;~~

~~a flavoring agent;~~

~~Verdilox;~~

~~Previon;~~

~~hemp extract;~~

~~glycerin;~~

~~sunflower lecithin; and~~

~~water.~~

84. The dosage form of claim 83, comprising:

about 12-17% glucosamine HCl;

about 0.01-1% hyaluronic acid;

about 29-33% brewer's yeast;

about 3-6% arabic gum;

about 0.5-2% guar gum;

about 12-16% of a flavoring agent;

about 0.01-0.1% Verdilox;

about 0.5-1.5% Previon;

about 3-6% hemp extract;

about 13-17% glycerin;

about 3-7% sunflower lecithin; and

about 3-7% water.

85. The dosage form of claim 83 or 84, comprising:

about 16% glucosamine HCl;

about 0.1% hyaluronic acid;

about 30.6% brewer's yeast;

about 4.8% arabic gum;

about 0.97% guar gum;

about 14.5% of a flavoring agent;

about 0.05% Verdilox;

about 0.97% Previon;

about 4.8% hemp extract;

about 15.5% glycerin;

about 5.8% sunflower lecithin; and

about 5.8% water.

86. A dosage form comprising:

hemp extract;

peanut butter;

rice bran;

glucosamine;

sweet potato;

molasses;

~~brewer's yeast;~~

~~sugar;~~

~~water;~~

~~glycerin; and~~

~~rice starch.~~

~~87. The dosage form of any one of claims 83-85, wherein the flavoring agent is selected from the group consisting of chicken liver powder, poultry extract, maltodextrin, butter, and bacon.~~

~~88. The dosage form of any one of claims 83-85, wherein the flavoring agent is chicken liver powder.~~

~~89. The dosage form of any one of claims 83-86, formulated as a chew for oral administration.~~

~~90. The dosage form of claim 89, where the chew is produced using cold extrusion.~~

~~91. A method for treating or reducing pain in a veterinary subject in need thereof, comprising administering to the subject a therapeutically effective amount of the composition of any of claims 1-55, or a dosage form of any of claims 56-90.~~

~~92. The method of claim 91, wherein the pain is associated with arthritis, post-operative pain, acute pain, joint pain, or multi-joint pain.~~

~~93. A method for treating epilepsy in a veterinary subject in need thereof, comprising administering to the subject a therapeutically effective amount of the composition of any of claims 1-55, or a dosage form of any of claims 56-90.~~

~~94. A method for treating epilepsy in a veterinary subject receiving phenobarbital, zonisamide, potassium bromide, and/or leviteracetam as anti-epileptic treatment, comprising administering to the subject a pharmaceutical composition or dosage form comprising about 2 mg/kg per day of a hemp extract.~~

~~95. The method of claim 94, wherein the veterinary subject is not receiving other anti-epileptic treatment.~~

96. The method of claim 94 or 95, wherein the hemp extract is administered about every 12 hours.

97. The method of any one of claims 93-96, wherein the veterinary subject has previously experienced generalized motor seizures or focal seizure episodes.

98. The method of any one of claims 93-97, wherein the veterinary subject has a decrease in the frequency and/or duration of seizures.

99. The method of any one of claims 94-98, wherein the hemp extract is present in the veterinary subject is a therapeutically effective amount of the composition of any of claims 1-55, or a dosage form of any of claims 56-90.

100. A method for treating cancer in a veterinary subject in need thereof, comprising administering to the subject about 5 mg/kg of a hemp extract.

101. The method of claim 100, wherein the veterinary subject is receiving L-CHOP or CHOP chemotherapy.

102. A method for improving quality of life in a veterinary subject with cancer, comprising administering to the subject a therapeutically effective amount of the composition of any of claims 1-55, or a dosage form of any of claims 56-90.

103. The method of claim 102, wherein the veterinary subject is receiving L-CHOP or CHOP chemotherapy.

104. The method of claim 100 or 102, wherein the hemp extract, composition or dosage form is administered about every 12 hours starting at week 4 or 5 of doxorubicin treatment.

105. The method of any one of claims 100-104, wherein the cancer is lymphoma.

106. The method of claim 105, wherein the lymphoma is intermediate to high-grade multicentric lymphoma.

107. The method of claim 106, wherein following treatment the veterinary subject experiences an absence of lymphoma-associated abnormalities or a decrease in lymph node diameter.

108. The method of any one of claims 100-107, wherein the veterinary subject has a body weight >15kg.

109. The method of any one of claims 100-108, wherein the veterinary subject is entering the end of the first cycle of L-CHOP chemotherapy.

110. A method for treating post-operative pain in a veterinary subject in need thereof, comprising administering to the subject a therapeutically effective amount of the composition of any of claims 1-55, or a dosage form of any of claims 56-90.

111. A method for treating post-operative pain in a veterinary subject in need thereof, comprising administering a hemp extract to the subject the night prior to surgery and then about every 12 hours for 12 days post-surgery along with a 5 day course of rimadyl.

112. The method of claim 110 or 111, wherein the veterinary subject has undergone tibial plateau leveling osteotomy surgery.

113. The method of claim 112, wherein the veterinary subject has been treated with fentanyl and/or a nerve block.

114. The method of claim 91-93, 99, 102, or 110, wherein the pharmaceutical composition or dosage form is administered at a dosage of about 0.1-8.0 mg/kg.

115. The method of 91-93, 99, 102, or 110, wherein the pharmaceutical composition or dosage form is administered at twice the therapeutically effective dosage for one week, and then subsequently administered at a therapeutically effective dosage.

116. The method of claim 115, wherein the therapeutically effective dosage is about 0.1-0.5 mg/kg.

117. The method of claim 115, wherein the therapeutically effective dosage is about 2 mg/kg.

~~118. The method of claim 115, wherein the therapeutically effective dosage is about 8 mg/kg.~~

~~119. The method of any one of claims 91-93, 99, 102, or 110, wherein the pharmaceutical composition or dosage form is administered at a dosage of about 1 mg/kg for one week, and then subsequently administered at a dosage of about 0.1-0.5 mg/kg.~~

~~120. The method of any one of claims 91-93, 99, 102, or 110, wherein the pharmaceutical composition or dosage form is administered at a dosage of about 4 mg/kg for one week, and then subsequently administered at a dosage of about 2 mg/kg.~~

~~121. The method of any of claims 91-120, wherein the method results in a therapeutically effective median maximal serum concentration of cannabidiol.~~

~~122. The method of claim 121, wherein the median maximal serum concentration of cannabidiol is about 102 ng/mL.~~

~~123. The method of claim 121, wherein the median maximal serum concentration of cannabidiol is about 590 ng/mL.~~

~~124. The method of any one of claims 91-123, wherein the veterinary subject is canine, feline, bovine, porcine, or equine.~~

~~125. The method of claim 124, wherein the veterinary subject is canine.~~

~~126. The method of claim 124, wherein the veterinary subject is feline.~~

~~127. A method of achieving an area under the curve from 0 time to 24 hours of between 42.4 and 3048 ng hr/ml for cannabidiol in a veterinary subject comprising administering to the subject an effective amount of hemp extract.~~

~~128. The method of claim 127, wherein the subject is canine or feline.~~

~~129. A method of treating or reducing pain in a veterinary subject in need thereof, comprising administering a therapeutically effective amount of a pharmaceutical composition comprising hemp extract and a carrier, wherein the hemp extract comprises:~~

~~cannabidiol; and~~

~~cannabidiolic acid;~~

~~wherein the ratio of cannabidiol to cannabidiolic acid is about 0.6:1 to about 1:0.6.~~

~~130~~12. Use of a hemp extract in the manufacture of a pharmaceutical composition for ~~A method of treating~~ the treatment of epilepsy in a veterinary subject in need thereof, wherein ~~comprising administering~~ a therapeutically effective amount of ~~a~~ the pharmaceutical composition comprising the hemp extract and a carrier is to be administered to the veterinary subject, and wherein the hemp extract comprises:

cannabidiol; and

cannabidiolic acid;

wherein the ratio of cannabidiol to cannabidiolic acid is about 0.6:1 to about 1:0.6.

~~131~~13. Use of a hemp extract in the manufacture of a pharmaceutical composition for ~~A method of~~ the treatment of ~~treating~~ cancer in a veterinary subject in need thereof, wherein ~~comprising administering~~ a therapeutically effective amount of ~~a~~ the pharmaceutical composition comprising the hemp extract and a carrier is to be administered to the veterinary subject, and wherein the hemp extract comprises:

cannabidiol; and

cannabidiolic acid;

wherein the ratio of cannabidiol to cannabidiolic acid is about 0.6:1 to about 1:0.6.

14~~132~~. Use of a hemp extract in the manufacture of a pharmaceutical composition for ~~A method of~~ improving quality of life in a veterinary subject with cancer, wherein ~~comprising administering~~ a therapeutically effective amount of ~~a~~ the pharmaceutical composition comprising the hemp extract and a carrier is to be administered to the veterinary subject, and wherein the hemp extract comprises:

cannabidiol; and

cannabidiolic acid;

wherein the ratio of cannabidiol to cannabidiolic acid is about 0.6:1 to about 1:0.6.

~~133. The method of any one of claims 129-132, where in hemp extract further comprises:~~

~~cannabigerolic acid;~~

Δ9-tetrahydrocannabinol; and

cannabichromene;

134. The method of any one of claims 129-133, wherein the hemp extract further comprises four or more of the following:

α-pinene;

β-myrcene;

β-pinene;

δ-limonene;

linalool;

β-caryophyllene;

α-humulene;

nerolidol 2;

guaiol;

caryophyllene oxide; and

α-bisabolol.

135. The method of claim 133 or 134, wherein the concentration of Δ9-tetrahydrocannabinol is insufficient to produce a psychotropic effect.

136. The method of any one of claims 133-135, wherein the ratio of Δ9-tetrahydrocannabinol to the other cannabinoids is about 1:25.

137. The method of any one of claims 133-136, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 1 mg/mL.

138. The method of any one of claims 133-137, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.5 mg/mL.

139. The method of any one of claims 133-138, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.3 mg/mL.

140. The method of any one of claims 133-139, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.2 mg/mL.

141. The method of any one of claims 133-140, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.1 mg/mL.

142. The method of any one of claims 133-141, wherein the concentration of Δ9-tetrahydrocannabinol is about 0 mg/mL.

143. The method of any one of claims 133-136, wherein the hemp extract comprises:
about 1-10 mg/mL of cannabidiol;
about 1-10 mg/mL of cannabidiolic acid;
about 0.05-0.2 mg/mL cannabigerolic acid;
about 0.1-0.3 mg/mL Δ9-tetrahydrocannabinol; and
about 0.1-0.4 mg/mL cannabichromene.

144. The method of claim 143, wherein the hemp extract comprises:
about 5 mg/mL of cannabidiol;
about 5 mg/mL of cannabidiolic acid;
about 0.11 mg/mL cannabigerolic acid;
about 0.25 mg/mL Δ9-tetrahydrocannabinol; and
about 0.27 mg/mL cannabichromene.

145. The method of any of one claims 129-144, wherein the hemp extract comprises:
about 0.09-0.13% α-pinene;
about 0.23-0.44% β-myrcene;
about 0.04-0.09% β-pinene;
about 0.05-0.09% δ-limonene;
about 0.03-0.06% linalool;
about 0.04-0.07% β-caryophyllene;
about 0.02-0.04% α-humulene;
about 0.04-0.07% nerolidol 2;
about 0.02-0.04% guaiol;
about 0.04-0.08% caryophyllene oxide; and
about 0.01-0.04% α-bisabolol.

146. The method of claim 145, wherein the hemp extract further comprises:
camphene;
β-ocimene;

~~eucalyptol;~~
~~isopulegol; and/or~~
~~nerolidol 1.~~

~~147. The method of claim 146, wherein the hemp extract comprises:~~
~~about 0.02% camphene;~~
~~about 0.02-0.03% β-ocimene;~~
~~about 0.02-0.05% eucalyptol;~~
~~about 0.02% isopulegol; and/or~~
~~about 0.02-0.04% nerolidol 1.~~

~~148. The method of claim any one of claims 129-147, wherein the hemp extract comprises 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or more of the following: α-pinene, β-myrcene, β-pinene, δ-limonene, linalool, β-caryophyllene, α-humulene, nerolidol 2, guaiol, caryophyllene oxide, α-bisabolol, camphene, β-ocimene, eucalyptol, isopulegol, and nerolidol 1.~~

~~149. The method of any one of claims 129-148, wherein the composition is formulated in a carrier.~~

~~150. The method of claim 149, wherein the carrier is selected from the group consisting of linseed oil, olive oil, fish oil, salmon oil, coconut oil, catnip oil, sesame oil, MCT oil, and grapeseed oil.~~

~~151. The method of claim 150, wherein the carrier is grapeseed oil.~~

~~152. The method of claim 150, wherein the carrier is catnip oil.~~

~~153. The method of any one of claims 129-152, wherein the composition comprises nepetalactone.~~

~~154. The method of any one of claims 129-153, wherein the composition comprises taurine.~~

~~155. The method of any one of claims 129-154, wherein the composition is formulated for administration using a nebulizer.~~

156. The method of any one of claims 129-154, wherein the composition is formulated for administration using a diffuser.

157. The method of any one of claims 129-154, wherein the composition is formulated for administration using a pet collar.

158. The method of any one of claims 129-154, wherein the composition is formulated as a pet food for oral administration.

159. The method of any one of claims 129-154, wherein the composition is formulated as a chew for oral administration.

160. The method of claim 159, wherein the weight of the chew is about 0.5-10 g.

161. The method of claim 160, wherein the weight of the chew is about 4 g, about 6 g, about 9 g, or about 10 g.

162. The method of claim 161, wherein the weight of the chew is about 4 g.

163. The method of claim 162, wherein the chew comprises:
about 7 mg of cannabidiol;
about 6 mg of cannabidiolic acid;
about 0.12 mg cannabigerolic acid;
about 0.32 mg Δ9-tetrahydrocannabinol; and
about 0.36 mg cannabichromene.

164. A method of treating or reducing pain in a veterinary subject in need thereof, comprising administering a therapeutically effective amount of a pharmaceutical composition comprising hemp extract and a carrier, wherein the hemp extract comprises four or more of:
α-pinene;
β-myrcene;
β-pinene;
δ-limonene;
linalool;
β-caryophyllene;
α-humulene;

~~nerolidol 2;~~

~~guaiol;~~

~~caryophyllene oxide; and~~

~~α-bisabolol.~~

~~165. A method of treating epilepsy in a veterinary subject in need thereof, comprising administering a therapeutically effective amount of a pharmaceutical composition comprising hemp extract and a carrier, wherein the hemp extract comprises four or more of:~~

~~α-pinene;~~

~~β-myrcene;~~

~~β-pinene;~~

~~δ-limonene;~~

~~linalool;~~

~~β-caryophyllene;~~

~~α-humulene;~~

~~nerolidol 2;~~

~~guaiol;~~

~~caryophyllene oxide; and~~

~~α-bisabolol.~~

~~166. A method of treating cancer in a veterinary subject in need thereof, comprising administering a therapeutically effective amount of a pharmaceutical composition comprising hemp extract and a carrier, wherein the hemp extract comprises four or more of:~~

~~α-pinene;~~

~~β-myrcene;~~

~~β-pinene;~~

~~δ-limonene;~~

~~linalool;~~

~~β-caryophyllene;~~

~~α-humulene;~~

~~nerolidol 2;~~

~~guaiol;~~

~~caryophyllene oxide; and~~

~~α-bisabolol.~~

~~167. A method of improving quality of life in a veterinary subject with cancer, comprising administering a therapeutically effective amount of a pharmaceutical composition comprising hemp extract and a carrier, wherein the hemp extract comprises four or more of:~~

~~α-pinene;~~
~~β-myrcene;~~
~~β-pinene;~~
~~δ-limonene;~~
~~linalool;~~
~~β-caryophyllene;~~
~~α-humulene;~~
~~nerolidol 2;~~
~~guaiol;~~
~~caryophyllene oxide; and~~
~~α-bisabolol.~~

~~168. The method of any one of claims 164-167, wherein the hemp extract comprises:~~

~~about 0.09-0.13% α-pinene;~~
~~about 0.23-0.44% β-myrcene;~~
~~about 0.04-0.09% β-pinene;~~
~~about 0.05-0.09% δ-limonene;~~
~~about 0.03-0.06% linalool;~~
~~about 0.04-0.07% β-caryophyllene;~~
~~about 0.02-0.04% α-humulene;~~
~~about 0.04-0.07% nerolidol 2;~~
~~about 0.02-0.04% guaiol;~~
~~about 0.04-0.08% caryophyllene oxide; and~~
~~about 0.01-0.04% α-bisabolol.~~

~~169. The method of claim 168, wherein the hemp extract further comprises:~~

~~camphene;~~
~~β-ocimene;~~
~~eucalyptol;~~
~~isopulegol; and/or~~
~~nerolidol 1.~~

~~170. The method of claim 169, wherein the hemp extract comprises:~~

~~about 0.02% camphene;~~
~~about 0.02-0.03% β-ocimene;~~
~~about 0.02-0.05% eucalyptol;~~
~~about 0.02% isopulegol; and/or~~
~~about 0.02-0.04% nerolidol 1.~~

~~171. The method of claim any one of claims 164-170, wherein the hemp extract comprises 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or more of the following: α-pinene, β-myrcene, β-pinene, δ-limonene, linalool, β-caryophyllene, α-humulene, nerolidol 2, guaiol, caryophyllene oxide, α-bisabolol, camphene, β-ocimene, eucalyptol, isopulegol, and nerolidol 1.~~

~~172. The method of any one of claims 164-170, wherein the composition is formulated in a carrier.~~

~~173. The method of claim 172, wherein the carrier is selected from the group consisting of linseed oil, olive oil, fish oil, salmon oil, coconut oil, catnip oil, sesame oil, MCT oil, and grapeseed oil.~~

~~174. The method of claim 173, wherein the carrier is grapeseed oil.~~

~~175. The method of claim 173, wherein the carrier is catnip oil.~~

~~176. The method of any one of claims 164-175, wherein the composition comprises nepetalactone.~~

~~177. The method of any one of claims 164-176, wherein the composition comprises taurine.~~

~~178. The method of any one of claims 164-177, wherein the composition is formulated for administration using a nebulizer.~~

~~179. The method of any one of claims 164-177, wherein the composition is formulated for administration using a diffuser.~~

~~180. The method of any one of claims 164-177, wherein the composition is formulated for administration using a pet collar.~~

181. The method of any one of claims 164-177, wherein the composition is formulated as a chew for oral administration.

182. The method of claim 181, wherein the weight of the chew is about 0.5-10 g.

183. The method of claim 182, wherein the weight of the chew is about 4 g, about 6 g, about 9 g, or about 10 g.

184. The method of claim 183, wherein the weight of the chew is about 4 g.

185. A method of treating or reducing pain in a veterinary subject in need thereof, comprising administering a dosage form comprising:

cannabidiol;

cannabidiolic acid;

cannabigerolic acid;

Δ9-tetrahydrocannabinol;

cannabichromene; and

one or more pharmaceutically acceptable additives, flavoring agents, surfactants, and adjuvants.

186. A method of treating epilepsy in a veterinary subject in need thereof, comprising administering a dosage form comprising:

cannabidiol;

cannabidiolic acid;

cannabigerolic acid;

Δ9-tetrahydrocannabinol;

cannabichromene; and

one or more pharmaceutically acceptable additives, flavoring agents, surfactants, and adjuvants.

187. A method of treating cancer in a veterinary subject in need thereof, comprising administering a dosage form comprising:

cannabidiol;

cannabidiolic acid;

cannabigerolic acid;

Δ9-tetrahydrocannabinol;

cannabichromene; and

one or more pharmaceutically acceptable additives, flavoring agents, surfactants, and adjuvants.

188. A method of improving quality of life in a veterinary subject with cancer, comprising administering a dosage form comprising:

cannabidiol;

cannabidiolic acid;

cannabigerolic acid;

Δ9-tetrahydrocannabinol;

cannabichromene; and

one or more pharmaceutically acceptable additives, flavoring agents, surfactants, and adjuvants.

189. The method of any one of claims 185-188, wherein the ratio of cannabidiol to cannabidiolic acid is selected from the group consisting of about 1:100, about 1:50, about 1:10, and about 1:1.

190. The method of any one of claims 185-189, wherein the ratio of cannabidiol to cannabidiolic acid is about 1:1.

191. The method of any one of claims 185-190, wherein the concentration of Δ9-tetrahydrocannabinol is insufficient to produce a psychotropic effect.

192. The method of any one of claims 185-191, wherein the ratio of Δ9-tetrahydrocannabinol to the other cannabinoids is about 1:25.

193. The method of any one of claims 185-192, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 1 mg/mL.

194. The method of any one of claims 185-193, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.5 mg/mL.

195. The method of any one of claims 185-194, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.3 mg/mL.

196. The method of any one of claims 185-195, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.2 mg/mL.

197. The method of any one of claims 185-196, wherein the concentration of Δ9-tetrahydrocannabinol is less than about 0.1 mg/mL.

198. The method of any one of claims 185-197, wherein the concentration of Δ9-tetrahydrocannabinol is about 0 mg/mL.

199. The method of any one of claims 185-192, wherein the dosage form comprises:

about 1-10 mg/mL of cannabidiol;

about 1-10 mg/mL of cannabidiolic acid;

about 0.05-0.2 mg/mL cannabigerolic acid;

about 0.1-0.3 mg/mL Δ9-tetrahydrocannabinol; and

about 0.1-0.4 mg/mL cannabichromene.

200. The method of claim 199, wherein the dosage form comprises:

about 5 mg/mL of cannabidiol;

about 5 mg/mL of cannabidiolic acid;

about 0.11 mg/mL cannabigerolic acid;

about 0.25 mg/mL Δ9-tetrahydrocannabinol; and

about 0.27 mg/mL cannabichromene.

201. The method of any one of claims 185-200, wherein the dosage form comprises four or more of the following:

α-pinene;

β-myrcene;

β-pinene;

δ-limonene;

linalool;

β-caryophyllene;

α-humulene;

nerolidol 2;

guaiol;

caryophyllene oxide; and

α-bisabolol.

202. The method of claim 201, wherein the dosage form comprises:
about 0.09-0.13% α-pinene;
about 0.23-0.44% β-myrcene;
about 0.04-0.09% β-pinene;
about 0.05-0.09% δ-limonene;
about 0.03-0.06% linalool;
about 0.04-0.07% β-caryophyllene;
about 0.02-0.04% α-humulene;
about 0.04-0.07% nerolidol 2;
about 0.02-0.04% guaiol;
about 0.04-0.08% caryophyllene oxide; and
about 0.01-0.04% α-bisabolol.

203. The method of claim 202, wherein the dosage form further comprises:
camphene;
β-ocimene;
eucalyptol;
isopulegol; and/or
nerolidol 1.

204. The method of claim 203, wherein the dosage form comprises:
about 0.02% camphene;
about 0.02-0.03% β-ocimene;
about 0.02-0.05% eucalyptol;
about 0.02% isopulegol; and/or
about 0.02-0.04% nerolidol 1.

205. The method of claim any one of claims 185-204, wherein the hemp extract comprises 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or more of the following: α-pinene, β-myrcene, β-pinene, δ-limonene, linalool, β-caryophyllene, α-humulene, nerolidol 2, guaiol, caryophyllene oxide, α-bisabolol, camphene, β-ocimene, eucalyptol, isopulegol, and nerolidol 1.

206. The method of any one of claims 185-205, wherein the flavoring agent is selected from the group consisting of catnip oil, peppermint oil, mango extract, beef, poultry, and seafood.

207. The method of claim 206, wherein the flavoring agent is catnip oil.

208. The method of any one of claims 185-207, wherein the dosage form comprises nepetalactone.

209. The method of any one of claims 185-208, wherein the dosage form comprises taurine.

210. The method of any one of claims 185-209, wherein the dosage form is formulated as a chew for oral administration.

211. The method of claim 210, where the chew is produced using cold extrusion.

212. The method of any one of claims 185-209, wherein the dosage form is formulated as a sublingual spray.

213. The method of any one of claims 185-209, wherein the dosage form is formulated as a water or alcohol soluble solution, a gel, or a cream for transdermal application.

214. The method of any one of claims 185-209, wherein the dosage form is formulated as a gel for buccal or mucosal administration.

215. The method of any one of claims 185-209, wherein the dosage form is formulated as a powder.

216. The method of any one of claims 185-209, wherein the dosage form is formulated as a solution for subcutaneous injection.

217. The method of any one of claims 185-209, wherein the dosage form is formulated as a tablet.

~~218. The method of any one of claims 185-209, wherein the dosage form is formulated as a capsule.~~

~~219. The method of any one of claims 185-209, wherein the dosage form is formulated as a hard chewable.~~

~~220. The method of any one of claims 185-209, wherein the dosage form is formulated as a soft chewable.~~

~~221. The method of any one of claims 185-209, wherein the dosage form is formulated in a carrier for oral administration.~~

~~222. The method of claim 221, wherein the carrier is selected from the group consisting of linseed oil, olive oil, fish oil, salmon oil, coconut oil, catnip oil, sesame oil, MCT oil, and grapeseed oil.~~

~~223. The method of claim 222, wherein the carrier is grapeseed oil.~~

~~224. The method of claim 222, wherein the carrier is catnip oil.~~

~~225. The method of any one of claims 185-209, wherein the dosage form is formulated for inhalation.~~

~~226. The method of any one of claims 185-209, wherein the dosage form is formulated for administration using a nebulizer.~~

~~227. The method of any one of claims 185-209, wherein the dosage form is formulated for administration using a diffuser.~~

~~228. The method of any one of claims 185-209, wherein the dosage form is formulated for administration using a pet collar.~~

~~229. A method of treating or reducing pain in a veterinary subject in need thereof, comprising administering a dosage form comprising:~~

~~glucosamine HCl;~~

~~chondroitin sulfate (76%);~~

~~brewer's yeast;~~

~~arabic gum;~~

~~guar gum;~~

~~a flavoring agent;~~

~~Verdilox;~~

~~Previon;~~

~~hemp extract;~~

~~glycerin;~~

~~sunflower lecithin; and~~

~~water.~~

~~230. A method of treating epilepsy in a veterinary subject in need thereof, comprising administering a dosage form comprising:~~

~~glucosamine HCl;~~

~~chondroitin sulfate (76%);~~

~~brewer's yeast;~~

~~arabic gum;~~

~~guar gum;~~

~~a flavoring agent;~~

~~Verdilox;~~

~~Previon;~~

~~hemp extract;~~

~~glycerin;~~

~~sunflower lecithin; and~~

~~water.~~

~~231. A method of treating cancer in a veterinary subject in need thereof, comprising administering a dosage form comprising:~~

~~glucosamine HCl;~~

~~chondroitin sulfate (76%);~~

~~brewer's yeast;~~

~~arabic gum;~~

~~guar gum;~~

~~a flavoring agent;~~

~~Verdilox;~~

- Previon;
- hemp extract;
- glycerin;
- sunflower lecithin; and
- water.

232. A method of improving quality of life in a veterinary subject with cancer, comprising administering a dosage form comprising:

- glucosamine HCl;
- chondroitin sulfate (76%);
- brewer's yeast;
- arabic gum;
- guar gum;
- a flavoring agent;
- Verdilox;
- Previon;
- hemp extract;
- glycerin;
- sunflower lecithin; and
- water.

233. The method of any one of claims 229-232, wherein the dosage form comprises:

- about 12-17% glucosamine HCl;
- about 1-4% chondroitin sulfate (76%);
- about 29-33% brewer's yeast;
- about 3-6% arabic gum;
- about 0.5-2% guar gum;
- about 12-16% of a flavoring agent;
- about 0.01-0.1% Verdilox;
- about 0.5-1.5% Previon;
- about 3-6% hemp extract;
- about 13-17% glycerin;
- about 3-7% sunflower lecithin; and
- about 3-7% water.

234. The method of any one of claims 229-233, wherein the dosage form comprises:

about 15.6% glucosamine HCl;

about 2.6% chondroitin sulfate (76%);

about 30% brewer's yeast;

about 4.7% arabic gum;

about 0.9% guar gum;

about 14.2% of a flavoring agent;

about 0.05% Verdilox;

about 0.9% Previon;

about 4.7% hemp extract;

about 15.1% glycerin;

about 5.7% sunflower lecithin; and

about 5.7% water.

235. A method of treating or reducing pain in a veterinary subject in need thereof, comprising administering a dosage form comprising:

glucosamine HCl;

hyaluronic acid;

brewer's yeast;

arabic gum;

guar gum;

a flavoring agent;

Verdilox;

Previon;

hemp extract;

glycerin;

sunflower lecithin; and

water.

236. A method of treating epilepsy in a veterinary subject in need thereof, comprising administering a dosage form comprising:

glucosamine HCl;

hyaluronic acid;

brewer's yeast;

arabic gum;

guar gum;

a flavoring agent;

Verdilox;

Previon;

hemp extract;

glycerin;

sunflower lecithin; and

water.

237. A method of treating cancer in a veterinary subject in need thereof, comprising administering a dosage form comprising:

glucosamine HCl;

hyaluronic acid;

brewer's yeast;

arabic gum;

guar gum;

a flavoring agent;

Verdilox;

Previon;

hemp extract;

glycerin;

sunflower lecithin; and

water.

238. A method of improving quality of life in a veterinary subject in need thereof, comprising administering a dosage form comprising:

glucosamine HCl;

hyaluronic acid;

brewer's yeast;

arabic gum;

guar gum;

a flavoring agent;

Verdilox;

Previon;

hemp extract;

glycerin;

~~sunflower lecithin; and~~

~~water.~~

~~239. The method of any one of claims 235-238, wherein the dosage form comprises:~~

~~about 12-17% glucosamine HCl;~~

~~about 0.01-1% hyaluronic acid;~~

~~about 29-33% brewer's yeast;~~

~~about 3-6% arabic gum;~~

~~about 0.5-2% guar gum;~~

~~about 12-16% of a flavoring agent;~~

~~about 0.01-0.1% Verdilox;~~

~~about 0.5-1.5% Previon;~~

~~about 3-6% hemp extract;~~

~~about 13-17% glycerin;~~

~~about 3-7% sunflower lecithin; and~~

~~about 3-7% water.~~

~~240. The method of any one of claims 235-239, wherein the dosage form comprises:~~

~~about 16% glucosamine HCl;~~

~~about 0.1% hyaluronic acid;~~

~~about 30.6% brewer's yeast;~~

~~about 4.8% arabic gum;~~

~~about 0.97% guar gum;~~

~~about 14.5% of a flavoring agent;~~

~~about 0.05% Verdilox;~~

~~about 0.97% Previon;~~

~~about 4.8% hemp extract;~~

~~about 15.5% glycerin;~~

~~about 5.8% sunflower lecithin; and~~

~~about 5.8% water.~~

~~241. A method of treating or reducing pain in a veterinary subject in need thereof, comprising administering a dosage form comprising:~~

~~hemp extract;~~

~~peanut butter;~~

~~rice bran;~~

~~glucosamine HCL;~~

~~sweet potato;~~

~~dry molasses;~~

~~sorbic acid~~

~~brewer's yeast;~~

~~sugar;~~

~~water;~~

~~glycerin;~~

~~potato starch;~~

~~dehydrated peanut butter;~~

~~rice starch; and~~

~~guar gum.~~

~~242. A method of treating epilepsy in a veterinary subject in need thereof, comprising administering a dosage form comprising:~~

~~hemp extract;~~

~~peanut butter;~~

~~rice bran;~~

~~glucosamine HCL;~~

~~sweet potato;~~

~~dry molasses;~~

~~sorbic acid~~

~~brewer's yeast;~~

~~sugar;~~

~~water;~~

~~glycerin;~~

~~potato starch;~~

~~dehydrated peanut butter;~~

~~rice starch; and~~

~~guar gum.~~

~~243. A method of treating cancer in a veterinary subject in need thereof, comprising administering a dosage form comprising:~~

~~hemp extract;~~

~~peanut butter;~~

~~rice bran;~~

~~glucosamine HCL;~~

~~sweet potato;~~

~~dry molasses;~~

~~sorbic acid~~

~~brewer's yeast;~~

~~sugar;~~

~~water;~~

~~glycerin;~~

~~potato starch;~~

~~dehydrated peanut butter;~~

~~rice starch; and~~

~~guar gum.~~

~~244. A method of improving quality of life in a veterinary subject in need thereof, comprising administering a dosage form comprising:~~

~~hemp extract;~~

~~peanut butter;~~

~~rice bran;~~

~~glucosamine HCL;~~

~~sweet potato;~~

~~dry molasses;~~

~~sorbic acid~~

~~brewer's yeast;~~

~~sugar;~~

~~water;~~

~~glycerin;~~

~~potato starch;~~

~~dehydrated peanut butter;~~

~~rice starch; and~~

~~guar gum.~~

~~245. The method of any one of claims 241-244, wherein the dosage form comprises:~~

~~about 5.0% hemp extract;~~

~~about 15.0% peanut butter;~~

~~about 12.5% rice bran;~~

~~about 12.75% glucosamine HCL;~~

~~about 5.5% sweet potato;~~

~~about 8.0% dry molasses;~~

~~about 1% sorbic acid;~~

~~about 5.0% brewer's yeast;~~

~~about 6.0% sugar;~~

~~about 9.25% water;~~

~~about 13.0 glycerin;~~

~~about 2.0% potato starch;~~

~~about 1.0% dehydrated peanut butter;~~

~~about 2.0% rice starch; and~~

~~about 2.0% guar gum.~~

~~246. The method of any one of claims 241-244, wherein the dosage form comprises:~~

~~about 5.0% hemp extract;~~

~~about 15.0% peanut butter;~~

~~about 13.0% rice bran;~~

~~about 8.5% glucosamine HCL;~~

~~about 6.0% sweet potato;~~

~~about 9.0% dry molasses;~~

~~about 1% sorbic acid;~~

~~about 5.0% brewer's yeast;~~

~~about 6.0% sugar;~~

~~about 9.5% water;~~

~~about 13.0 glycerin;~~

~~about 4.0% potato starch;~~

~~about 1.0% dehydrated peanut butter;~~

~~about 2.0% rice starch; and~~

~~about 2.0% guar gum.~~

~~247. The method of claim 241-244, wherein the dosage form comprises:~~

~~about 3.0-10.0% hemp extract;~~

~~about 10.0-20.0% peanut butter;~~

~~about 10.0-15.0% rice bran;~~

~~about 5.0-15.0% glucosamine HCL;~~

~~about 4.0-10.0% sweet potato;~~

~~about 6.0-13.0% dry molasses;~~

~~about 0.5-5.0% sorbic acid;~~

~~about 2.0-8.0% brewer's yeast;~~

~~about 3.0-8.0% sugar;~~

~~about 5.0-15.0% water;~~

~~about 8.0-18.0% glycerin;~~

~~about 1.0-8.0% potato starch;~~

~~about 0.5-5.0% dehydrated peanut butter;~~

~~about 1.0-5.0% rice starch; and~~

~~about 1.0-5.0% guar gum.~~

~~248. The method of any one of claims 241-244, wherein the dosage form comprises about 5.0% hemp extract.~~

~~249. The method of any one of claims 229-240, wherein the flavoring agent is selected from the group consisting of catnip oil, chicken liver powder, poultry extract, maltodextrin, butter, and bacon.~~

~~250. The method of any one of claims 229-240, wherein the flavoring agent is chicken liver powder.~~

~~251. The method of any one of claims 229-240, wherein the flavoring agent is catnip oil.~~

~~252. The method of any one of claims 229-251, wherein the dosage form comprises nepetalactone.~~

~~253. The method of any one of claims 229-252, wherein the dosage form comprises taurine.~~

~~254. The method of any one of claims 229-253, wherein the dosage form is formulated as a chew for oral administration.~~

~~255. The method of claim 254, where the chew is produced using cold extrusion.~~

~~256. The method of any one of claims 91, 129, 164, 185, 229, 235, or 241, further comprising administering the subject gabapentin.~~

~~257. The method of claim 256, wherein the pain is post-operative.~~

~~258. The method of claim 257, wherein the veterinary subject has undergone spinal surgery.~~

~~259. The method of claim 258, wherein the spinal surgery is a hemilaminectomy.~~

~~260. The method of any of claims 256-259, wherein the veterinary subject is administered 8-12 mg/kg of gabapentin and 6-10 mg/kg of hemp extract every 6-10 hours.~~

~~261. The method of any of claims 256-260, wherein the veterinary subject is administered about 10 mg/kg of gabapentin and about 8 mg/kg of hemp extract every 8 hours.~~