



DR. AVA FRICK'S  
*LifeExtend Method*  
For Healthy, Happy, and Naturally Rejuvenated Animals

# Natural Pain Remedies

*For Cats and Dogs*

AVA FRICK, DVM



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## NATURAL PAIN REMEDIES FOR PETS

Pain is often invisible yet its destructive nature is not. Knowing when an animal is in pain can be challenging. Depending on the species and demeanor of the animal, they may hide the signs for any number of reasons. Maybe because they are stoic, or to avoid being targeted. Nevertheless, it picks away at health and the willingness of that animal to be touched or handled, to move about or play, or even to groom themselves or eat.

Some signals of impending pain can be; the size of the pupil, movement of ears, quivering of the skin, swishing a tail, avoiding being petted, not wanting to mingle with others, growling, hissing or biting. Other indicators that pain is present to some degree somewhere in the body include; moaning or crying, change in personality, abnormal gait, shifting weight, altered posture, guarding a part of the body, difficulty getting up or down and even chewing off to one side (dental pain).

Pain can exist from a recent dental or surgery, an injury, sprained or torn ligament or tendon, internal organ disease, cancer, and the most common is arthritis. Acute pain is obvious and distressing and lasts only a few weeks at the most. It may be high intensity initially but digresses daily. Chronic pain is that which lasts longer than two to three months and is not resolving. It can often be subtle, and masked as "getting old" or "slowing down." Those with chronic pain may develop a familiarity with it and that makes it even more challenging for the onlooker to determine its presence. The third type is nerve related pain and is caused by damage to or dysfunction in the nervous system. This kind can be difficult to diagnose and treat and may lead to body compensation and chronically (in some animals) it may cause aggression.

My focus is to eliminate pain. I offer many options to treat the various causes of pain in animals including physical rehabilitation, chiropractic, microcurrent and laser therapy, therapeutic massage and customized exercise programs. Oral support primarily comes in the form of supplements, herbs, homeopathic preparations, essential oils and nutritional optimization. Sometime medications may need to be used in order to achieve an acceptable comfort level.

## FACTORS THAT CAN DETERMINE IF YOUR CAT OR DOG WOULD DEVELOP PAIN

- Genetics
- Nutrition
- Life Style
- Exercise (or lack thereof)
- Accidents & injuries
- Chronic inflammation
- Healthcare choices



## WHY PAIN MAY PERSIST

- If you don't treat for the right location, the pain may never be resolved
- If you don't also address pain messages at the brain, chronic pain can ensue
- If you don't consider everywhere [There is always multi body systems involved]
- If you do not support the body with nutritious wholesome meals or specific vitamins, minerals and/or nutrients are in excess or deficient
- Obesity from high caloric intake
- Lack of energy expenditure, i.e., not enough exercise
- Inflammation being present [Determine the degree of inflammation by having a Fur Tissue Mineral Analysis Test done. [www.LifeExtendMethod.com](http://www.LifeExtendMethod.com)]
- Administering certain medications, like antibiotics and corticosteroids, that interfere with vitamins, minerals and other key nutrients
- Wrong or missing diagnosis
- Injuries, scars, or wounds that were not rehabbed properly and now the pet is dealing with restrictions, adhesions, and reduced range of motion
- An aging body that has lost resiliency
- Dog or cat refuses to accept what you are offering. Won't do the exercises. Spits out the pills, liquids, powders. Refuses to eat if you hide anything in any food.
- You can add to this list!

## CATS HIDE PAIN VERY WELL

Silent pain is a type of pain that can be difficult to identify, as it may not have any obvious signs or symptoms. Some common causes of silent pain in cats include dental disease, joint pain, and digestive issues. They can develop cavities along the gumline of a tooth and this is very painful. Joint disease is commonly found in the front legs before their hips. But certainly, hip pain with age reduces their ability to jump up gracefully onto chairs and counters and makes it difficult to enter and exit litter boxes. Providing a low-profile litter pan, like a lid from a box with a plastic liner, often eliminates the soiling issues.

Pet parents can take several steps to help identify silent pain in their cats. An important one is to be observant and watch for any changes in behavior, such as reluctance to play,

groom, or eat. Other steps include regular dental checkups, maintaining a healthy weight, and providing necessary pain relief.

## **Pain in Cats Could Present as Changes in Behavior with Stress and Anxiety**

What stresses one cat could be totally ignored by another, even in the same household. Stress can lead to anxiety. For the cat person, it is good to be aware of triggers that could be considered a “problem” to some felines.

Having new furniture, carpet or floor installed at home, loud music being played, dirty litter box conditions or a change in brand of litter, food changes, travel, being denied access to particular hiding place, appearance of a strange cat in the yard, a barking dog, visitors in the home, moving to a new home, death or divorce in family, any new additions (2 or 4-legged), illness, abuse, injury, and the list goes on.

### **Signs of stress or anxiety in cats may include:**

- Loss of appetite
- Excessive grooming, eventually causing excessive alopecia
- Less interaction with family members
- Hiding
- Change in the relationship with companion cats
- Elimination outside of the litter box
- Aggression



### **Actionable steps you can take:**

- Observe what is the root cause and then try to avoid it or at least modify.
  - Work closely with your veterinarian to develop a pain management plan that is safe and effective for your cat.
- Monitor your cat's pain and comfort levels and behavior, and report any changes to your veterinarian. As cats age they commonly get thin and often are cold. A padded bed and blanket are often not enough, especially in cold climate. Use a heating blanket in their favorite spot so they can be snugly warm all the time. It will improve circulation all over.
  - Find a veterinarian with a house call practice so your cat won't need to take that awful car ride.

## **CHRONIC PAIN**

The importance of the volume of potential chronic pain sources is that it is more prevalent than what we may realize and the impact on the animal's life quality is huge. Chronic pain could originate almost anywhere in the body. Here are some possibilities: musculoskeletal system, chronic joint subluxations, arthritis, neurologic nerve pain (IVDD), neuropathy or

radiculopathy urogenital system (cystitis), dermatologic, dental disease, stomatitis, ocular, residual issues from prior surgery, gastrointestinal distresses, constipation with megacolon in cats, cardiopulmonary diseases, otitis and any cancers; especially bone and brain.

## **GOAL to REDUCING PAIN**

We need to focus on slowing the transmission of pain at the site. The transduction of pain from there to the spinal cord followed by modulation of pain as the message ascends to the brain. And then pain at the brain level correcting perception, which results in new messages being sent out to the body. If we are aware of the four levels of pain messaging and cleverly address them all, then pain can become a part of your cat or dog's history and not something to deal with every day of their life.

There are many ways to treating pain by introducing inhibition of impulse conduction or speed in which it moves; Acupuncture, Chiropractic, Reiki, Massage, Vibrational Therapy (including music), Kinesiotape, Microcurrent and Laser therapy, to mention a few.

The remainder of this booklet will be focusing on some of the many ways that you can use natural and safe remedies for the pain your dog or cat may be experiencing.

## **NUTRITIONAL ASPECTS FOR PAIN**

Nutrition affects pain and healing at three basic levels

- Food must provide raw materials for repair and development within the body
- Dietary supplements can enhance biochemical pathways, altering inflammation and affecting healing
- Poisons can be ingested that negatively affect ability to heal

Supporting the body with whole vitamins and minerals feeds the organs and tissue as well as combats the residual toxins and resulting mechanisms of the presence of them in the body. Glutamate, magnesium, and calcium are necessary to be available at receptors in the dorsal horn of the spinal cord in order to prevent what we call modulation, or a reshaping and changing of nerve fibers. They prevent the emergence of central hypersensitization and the transition from acute to chronic pain.

Proper nutrition is essential for maintaining your pet's overall health and preventing pain. Cats thrive on a natural and raw food diet. They are true carnivores and need lots of real meat every day of their life. Feeding this way can help reduce inflammation throughout the

body. Dogs are omnivorous carnivores, meaning they eat a bit more variety including plants and some grains.

Improve the nutrient quality of food by keeping the carbohydrate level at 25% or less. Also include a good level of real food proteins. These can best be accomplished by feeding raw, freeze-dried, or slightly cooked foods available on the market. Some of my favorites are B.A.R.F, Yumwoof, Northwest Naturals, Primal, Sundays, Raised Right, and Chi Dog. But there are many great companies out there. Or create your own home recipe via BalanceIT.com or other great nutrition focused holistic veterinarians.



*Interested in finding out what your dog or cat  
Actually needs? Get a Fur Tissue Mineral  
Analysis Test done and then you will have a  
road map to follow toward better health,  
without guessing. (LifeExtendMethod.com)*

Another point and word of caution – **Dogs and cats synthesize vitamin C.** They do NOT need more vitamin C added to their food or supplements. In fact, this very thing (excess vitamin C) adds to calcium deficiency in the interstitial fluid. With that we get a body that cannot support dentition, ligaments or tendons. And a situation where they are unable to be calm, stressless, or without fears and anxiety because vitamin C pulls calcium out of the tissue and interstitial fluid where all the fuel for body physiology and metabolic processes needs to be present.

## **OPTIMAL WEIGHT**

### **1 in 4 Dogs & Cats in the Western World are Obese – Why is that?**

- Neutering or spaying
- Poor diet
- Too much diet
  - Metabolic condition - liver & carbohydrate digestion malfunction
- Medication or drug induced
- Endocrine malfunction
- Arthritis pain leading to lack of or no exercise
- Indoor lifestyle
- Genetic predisposition

Obesity is predominantly caused by over-consumption of calories, under-expenditure of energy, and improper nutrient balance (more carbohydrates in relation to the protein). Getting an obese animal to lose weight needs a full endocrine approach as well as attention to digestive metabolism and some form of exercise other than the trips to the food bowl. The challenge with food labels for pets is that they do not report the percentage of carbohydrates in the diet. There is a common belief that protein restriction is helpful in older animals, yet scientific evidence on that is countered by others showing reduced dietary protein is unbeneficial for older bodies. In fact, reduced protein diets for older pets may have adverse effects by contributing to the muscle loss that occurs with aging.

### **Obese animals, like people, usually show signs of concurrent disease:**

Lameness, increased drinking and urinating, increased respiratory effort or panting, sleeping more, poor skin and coat, joint degradation, diabetes and heart stress with circulatory malfunction.

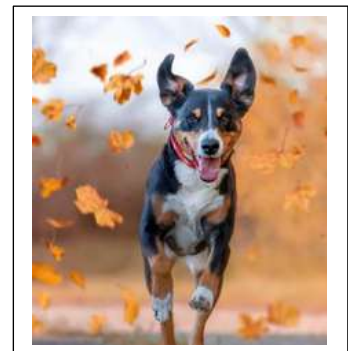
### **Count Calories to lose weight or feed better!**

- Caloric average is 30 kcal/# of ideal weight
  - Weight loss should be between 0.5% and 2% of initial body weight per week

### **THEN EXERCISE**

Exercise is beneficial in many ways:

- Oxygenates tissue, improves circulation
- Helps to prevent weakening of the musculoskeletal system
- Reduces development of arthritis
- Maintains weight and caloric consumption balance
- Give you something to do
- Exercise activity is good for the mind



Have a regular exercise routine, even if it is two short walks a day. Movement leads to circulation so the good can move in and the bad move out. I created a low impact exercise program called *Tai Chi-huahua™* for cats and dogs. And a body-zone directed collection, *Dog Stretching & Exercises*. Both are applicable for any age of dog. (LifeExtendMethod.com)

## ABOUT THOSE JOINTS

The quality of muscles, ligaments, tendons, and bones is a reflection of endocrine function including the parathyroid glands, body pH (affecting the ability to get calcium into suspension), kidney status, and what the body is able to do with the levels of available tissue calcium and magnesium. Looking only at the joints will leave much unaddressed. The loss of joint integrity is the end result of inadequate mineral levels over time and the inability of body systems to mobilize phosphorus, calcium and magnesium.

The spine is made up of back bones called vertebrae. Cats and dogs have 7 in the neck, 13 down the chest, 7 lumbar and a sacrum (3 bones fused into 1). That is a total of 28 vertebrae, not counting the wagging tails! The muscular system's main function is to allow movement. When muscles contract, they contribute to gross and fine movement. Muscle tendons stretch over joints and contribute to joint stability. Muscle tendons in the knee joint and the shoulder joint are crucial in stabilization. Skeletal muscles help keep the body in the correct position when sitting or standing. This is known as posture. Obesity will compromise the function of the musculoskeletal system.

### Here are some ideas to help build a stronger support system:

1. Maintain chiropractic visits with a doctor certified by the American Veterinary Chiropractic Association. [AnimalChiropractic.org](http://AnimalChiropractic.org)
2. There are many glucosamine and chondroitin products on the market varying in quality and content. Some of my favorites are Standard Process *Canine Musculoskeletal Support*, Platinum Performance *OrthoChon HA*. *Arthrimaxx* and Duralactin are for both cats and dogs.
3. Venjenz has a liquid product called Fulcrum.
4. New Zealand Deer Velvet has Dog Joint and Cat Joint



### Herbs for Musculoskeletal System support include:

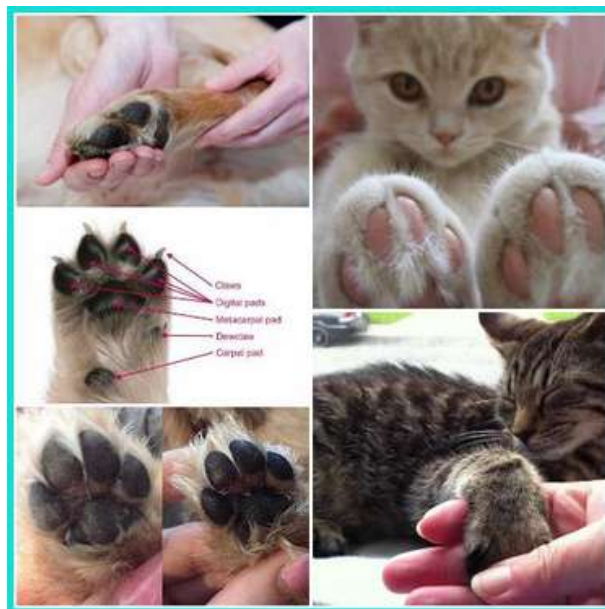
- Inflammation – Boswellia, Ginger, Celery seed, Turmeric, Curcumin
- Pain – Boswellia, Copaiba, Corydalis
- Tone veins, stamina, tissue repair – Gotu Kola, Horsechestnut
- Bone and remodeling – Kudzu root, Black Cohosh
  - Maintain and support healthy joints & muscles. From [BanyanBotanicals.com](http://BanyanBotanicals.com) I use these – Nettle leaf, Kaishore Guggulu, Yogaraj Guggulu

## PET MASSAGE

Learn massage and have a time each week devoted to doing this on your pet. Even brushing can be a form of massage, invigorating the skin and moving circulation.

Just as with humans, massage is a touch technique used to maintain and improve physical and mental health. It has been practiced for thousands of years. In more recent years, people have realized how beneficial massage can be for animals. Massage can help prevent potential future injuries to tissue and aid the body with healing. Animal massage can cause your pet's body to release endorphins, which are nature's chemicals that relieve pain and make your pet feel good. And it becomes a great one-on-one time to strengthen the bond between you and your pet!

I offer a special type of massage on the paws called "PAW SPA" (See below). It starts with soaking your pet's paws in an essential oil mixture to help release any toxins that are adhered to the paws and paw pads. The soak is followed by several minutes of massage. The massage will improve your pet's circulation and aid in detoxing while also target specific organ points along the toes and pads.



Here are many of the benefits of massage therapy for animals:

Physical and mental support:

- Increase circulation and help eliminate toxins and waste products
  - Improve joint flexibility and muscle tone, especially beneficial to older animals and those with active lives
- Improve the condition of their skin and coat
  - Improve their attitude and ability to focus, which can affect behavior, training, and performance

Mental, behavior and temperament support:

- Gain their trust through the act of being touched in a passive, calm, nourishing way
- Reduce nervousness or calm the hyperactive pet
- Help a shy or submissive pet feel more secure
- Relax an aggressive or dominant pet

Injury or surgery recovery or chronic conditions:

- Improve circulation to atrophying muscles helping better function
- Reduce likelihood of scar tissue and adhesions
- Relief from muscle soreness and spasms
- Relief of pain and discomfort associated with arthritis and hip dysplasia

Dr. Frick's

## PAW SPA



*Dr. Frick's Paw Spa* with your dog or cat has 5 benefits:

- To help release from the pads any toxins that are adhered and could lead to future disease
- Massaging specific reflexology points in the paw can help those organs be stimulated, improve circulation, and aid in detoxing
- The doTERRA Lime and Wild Orange oils used are uplifting, antiseptic, antiviral, antibacterial, restorative, and tonifying for immune and digestion
- A quiet time for you to share with your fur baby
- Can reduce the mental stress that accompanies having feet handled and make future nail trimming easier

## Guidelines

- 1 teaspoon Epsom salt to the Paw Spa bowl.
- 3 drops of doTERRA essential oil, Lime or Mandarin Orange to the bowl for dogs under 50#, and 5 drops of oil for dogs over 50#
- Add warm water (to dissolve the Epsom salt) enough volume to allow the foot to be covered. Swirl to mix.
- For large dogs: Start by soaking the dog's rear paws – 2 to 5 minutes. Sometimes the dog will tell you when they are done soaking if they've been standing still and try to step out after a few minutes. Pat the paws dry. Repeat the same with the front paws.
- For cats & small dogs: Soak the 2 rear paws in 1 bowl and 2 front paws in 1 bowl. Soak 2 to 5 minutes. Pat paws dry.



- Have the pet lay down for the paw massage. Apply coconut oil to your palm and rub on pads of paw.
- Start by doing clockwise circles, slowly increasing pressure, on the divot above the large pad.
- Rub each pad in a clockwise circle with the tips of your thumbs, making sure to spend time massaging the outer part of each pad where the pressure points are. Focus on any specific organ point where your dog may be experiencing difficulty.
- Apply direct pressure to the center of each pad, holding the pressure 5 seconds.
  - Rub circles down each toe. When you are finished, pull straight pressure down each toe, stretching them out.

Enjoy this special time with your fur-baby!

## PROPERTIES OF ESSENTIAL OILS FOR EMERGENCIES AND FIRST AID

Plants use the essential oils they produce for their own biological safety. Essential oils are known to be antimicrobial, anti-histaminergic, and anti-inflammatory. They can serve as neurotransmitters, tissue hormones, enzymes, and cofactors for biological processes. They promote tissue healing by supplying negative ions, ozone and oxygen. Essential oils can help manage pain and infections and promote tissue regeneration.

*Bleeding* — *Helichrysum italicum* on location, undiluted. This oil can stop bleeding, protects against infections and promotes tissue healing. Very useful after dental procedures.

*Bruising and pain* — *Helichrysum italicum*, Peppermint and Frankincense (*Boswellia carterii*) undiluted on area of concern.

*Analgesia* --- Copaiba can be applied topically to sore muscles, bruises, teeth and gums, trouble skin, and more for pain relief

*Burns, bug bites, poison ivy* — Lavender (*Lavandula angustifolia*) apply to area every five minutes for 30 minutes, then twice a day until healed

*Allergic reactions* — Lemon, Blue Tansy (*Tanacetum annuum*) and Frankincense, undiluted on the area. Can use over carotid arteries if systemic reaction. Very useful topically at vaccine injection sites.

*Heat stroke* — Peppermint diluted in ice water and misted over the whole body. Place undiluted on the feet and follow with a cold wet pack to drive in the oil.

These are just some examples of how to use essential oils in an emergency, to support recovery. In first aid applications, the oils are rarely diluted. This is a time for strong action.

## HERBS FOR PAIN

When properly utilized, herbs can serve as adjunctive or perhaps primary agents in pain management. While many herbs are capable of affecting some component of pain symptoms, the following group represents those with specific well-documented actions on specific processes that mediate pain.

- **White Willow, Salicin** - Antipyretic, analgesic, anti-inflammatory (Cox 1 and Cox 2 inhibitor), antirheumatic. Studies suggest the direct action of white willow on the gastric mucosa may be considerably less than that of aspirin or NSAIDs

- **Boswellia** - Maintain and support healthy joints, reduce swelling. Cox 1 and Cox 2 inhibitor.

- Promote the body's normal resistance function

- Support healthy circulation

- Support healthy response to environmental stresses

- Supports the normal function of the kidneys to clear acidic waste products effectively



- **Tumeric** - Tincture of turmeric is used for analgesia and anti-inflammatory effects. It reduces the inflammatory cascade through direct stabilization of membrane fatty acid content. Prevents biosynthesis of arachidonic acid and subsequently prostaglandins.

- **St. John's Wort** - Behavioral and Psychological Effects - Synergistically promotes anti-depression, sedation, and anxiolytic properties. Relaxation reduces nerve impingement and therefore it can be good for nerve pain.

- **Chamomile** - The flower and entire herb are used as an infusion for inflammatory pain and pain-related anxiety. Medicinal oil is extracted from fresh or dried flower heads. Chamomile oil vapors can reduce stress and improve moods in general.

- **Valerian** - Anxiolytic, muscle relaxant, sedative

- Central nervous system depressant, sedative, anxiolytic

- A cat study demonstrated anxiolytic and anti-aggressive properties

- Combined w/St. John's Wort for SAS, feline house soiling

- **Siberian ginseng** - Analgesic for kidney pain, rheumatoid pain, inflammatory pain, and has immune modulating effect on T-lymphocytes

## OTHER ANALGESIC REMEDIES

**EASE** is a Full Spectrum CBD Oil for Cats and Dogs is a great anti-inflammatory for pets with:

- Allergies
- Pain
- Arthritis
- Pancreatitis
- Inflammation

**SOOTHE** is good for hot spots, bug bites, dermatitis, allergies, flare-ups and more with this all-natural Full Spectrum Hemp salve.

## COLOSTRUM

Colostrum is composed of over 250 functional constituents, including immune-stimulating peptides and antimicrobial agents. Colostrum is also a great source of antioxidants and growth factors that can help create a healthy inflammatory response in the body.

**Duralactin** is a colostrum product that has worked well for my patients.

## DEVIL'S CLAW

Devil's claw is a plant native to South Africa. It is anti-inflammatory and an antioxidant. It can be used for arthritis and joint and back pain. It is considered safe for cats. There is a great range of dose with Devil's Claw; 100- 250 mg for a small dog and cats, 500 mg for medium size dogs and up to 1000 daily for a giant breed dog.

## QUERCITIN

Antioxidant, anti-inflammatory and anti-viral.  
Safe for cats and dogs. I prefer to use it just by itself.  
Why add more into something that is good just as it is?

## CORYDALIS

Corydalis is also known as Yan Hu Suo or Chinese Poppy and has been used in Traditional Chinese Medicine for Centuries for its tranquilizing properties to soothe discomfort. The tuber has a history of over a thousand years use in mitigating pain. Corydalis possesses soothing, narcotic and tranquilizing properties and is commonly used to alleviate abdominal pains and help with relaxation. It has excellent anti-inflammatory and analgesic evidence for arthritis, reduces Cox 1 and Cox 2 activity while also inhibiting the production of various inflammatory cytokines. Use this in place of Gabapentin.

## MSM – methylsulfonylmethane

Derived from Dimethyl sulfoxide (DMSO). MSM is a biologically active sulfur. MSM has pain- reduction and anti-inflammatory properties.

DMSO has been used for nearly 40 years in veterinary applications to relieve pain and inflammation. It is currently used in integrative human practices for treating cancer.

>Inhibits transmission of pain messages by nerves

>Anti-inflammatory by repressing cytokine production

and prostaglandin

## CHLOROPHYLL

Burns, areas of high inflammation, arthritis, exhausted and traumatized tissue, will build up guanidine at the site. Guanidine is the end product of creatine breakdown, a fatigue & tissue poison. Therefore, its presence creates pain and soreness. Chlorophyll is a guanidine antagonist and can be given orally or applied topically at a wound. My favorite is Standard Process Chlorophyll Complex.

This is also one reason why dogs eat grass. The body having inflammation of the GI tract, they are driven to find a solution. And greenery outdoors has it! Chlorophyll is very soothing and healing to epithelial cells. These type of cells line the GI, lungs, urinary bladder, and are on the skin. Aloe vera plants can also be used similarly to help with inflammation.

## COCOMEGA EFFECT – coconut and omegas

All cases of joint pain share one unifying principle – excess circulating proinflammatory messenger molecules. Those messenger molecules are derived

from arachidonic acid that sensitize nerves to pain. The enzymes used by the body to convert arachidonic acid into these proinflammatory molecules are the target of NSAIDS.

EPA and DHA from fish oil support the production of

anti-inflammatory molecules and reduce the conversion of arachidonic acid to pro-inflammatory molecules.

\*[NOTE: In presence of a slow thyroid, oils may not be beneficial and need to look elsewhere to achieve this.]

Coconut oil has attracted attention due to its ability to lower cholesterol in the blood, reduces fatty liver, is anticancer, antidiabetic, antioxidant, anti-inflammatory, antimicrobial and has skin moisturizing properties. When added to omegas there is a synergic effect where greater gains are achieved than what would be with either item individually.

Jaron Lukas at Yumwoof.com has researched extensively the benefits of this combination and has integrated it into the Yumwoof air-dried recipes and supplements. He has a new book about this out soon, *The Cocomega Effect*, and I contributed a chapter.

## HOMEOPATHICS

**Arnica Montana** – sore mouth and teeth, pain after surgery, muscle and arthritis pain, insect bites, bruising

**Byronia 30C** – muscle pain, arthritis, cancer, liver disease, relieve constipation and gastritis

**Colchicum Autumnale** (For plant enthusiast this is the Autumn Crocus or Naked Ladies) – pain from arthritis, rheumatism, gout, back pain

**Hypericum Perforatum** (St. John's Wort) – nerve pain

**Kalmia Latifolia** – Neuralgia, neck and back pain, shooting pain

**Magnesia Phosphorica** – Nerve pain

**Rhus tox** (poison ivy) – soft tissue related joint pain, skin surface itching and irritation

## COLD AND HEAT THERAPY

**COLD or cryotherapy** should be used immediately after a new injury to help reduce the degree of trauma the tissue will have to deal with. Initiating cold for up to 20 minutes at a time can do several things.

- By decreasing the cell metabolic rate, it slows the requirement for nutrients, oxygen, and perfusion. Slowing its work capacity allows for a quiet environment in the face of trauma and the changes that brings to the area.
- Vasoconstriction helps to stop bleeding, reducing bruising and swelling.
- Decreasing an inflammatory response means less redness, less pain, and potentially less chance for infection.
- A decreased nerve conduction velocity is achieved by the chilling effect. Slowing nerve transmission is how it reduces pain.
- Decreasing muscle contraction helps further to prevent nerve irritation and pain.

For these reasons it is wise to apply cold therapy for the first 3 days after injury or at the end of a busy day when a body suffers from a chronic arthritic or inflammatory condition. Utilizing massage with cold therapy yields better results than either done alone.

### **Applying Cold Therapy:**

WHEN – During the first 72 hours after tissue injury

HOW - 15 minutes per treatment (do not exceed 20 minutes) 3 to 5 times per day

WHAT – You can use any of the following. Cold plus massage benefits more than cold used alone.

- Ice cups – fill Styrofoam cups, freeze tear off part of cup and use to massage and chill the area
- Cold packs – these are commercially available or you can make your own with a freezer zip lock bag. Mix 2 parts water and 1 part isopropyl alcohol. Put in freezer where it will become a cold pliable icy bag. Wrap in a small towel before applying to the animal's body.
- Flax pillow in the freezer

**HEAT or thermal therapy** is used starting 3 days after an injury or for a chronic condition like arthritis to help create circulation and relaxation in tissue. Heat helps with muscle spasms, tendinitis, bursitis, scars and contracted tissue, sprains and strains, and chronic pain. It does this by:

- Increasing the body's capacity to use oxygen.
- It further increases membrane diffusion and enzymatic activity using the oxygen and moving metabolic wastes (toxins and trash) out of the traumatized tissue area. Getting the old cellular debris expelled further reduces pain.
- Opening up blood vessels (vasodilation) also gets more nutrients into the tissue.
  - Locally heat decreases pain by decreasing muscle spasm and connective tissue ischemia and lengthens the shortened fascia that had been putting pressure on nerves.
  - Heat causes a reflex pain inhibition by increasing the temperature of sensory nerve cells. The message of heat travels rapidly to the brain, blocking out the pain message and raising the threshold of the sensory nerve endings resulting in long term pain relief.

### **Applying Heat Therapy:**

WHEN - After 72 hours with an acute injury or with a chronic condition

HOW - Up to 20 minutes or divided doing 10 minutes on/ 10 off/10 on. The

temperature of the target tissue must elevate at least 5 degrees Fahrenheit, but DO NOT exceed 12 degrees elevation. Moist heat is preferred.

WHAT -

- Flax pillows
- Air activated heat wrap applications can be used.
- Moist heat towel
  - o Take a small towel and saturate with water then ring out most of it. Put it into a plastic bag and place in the microwave for 1 minute, invert the towel exposing the inside and heat for additional time if needed. When finished heating take the towel out of the plastic and wrap it in a dry towel then lay across the affected area.



## DEVICES

At home devices that can further improve sore aging bodies is The ReVitaVet laser system and the Alpha-Stim® microcurrent device. My success in rehabilitation would not be what it is without them.

- Alleviate pain (analgesic):
- Partially blocks pain signals from nerves to the brain
- Decreases nerve sensitivity
- Reduce inflammation
- Dilate blood vessels
  - Activate the lymphatic system to drain swollen areas that are the result of trauma or inflammation
- Stimulate the production of high levels of pain-killing chemicals including endorphins, enkephalins, and opioids in the brain and adrenal glands
- Stimulate muscle trigger points and acupuncture points non-invasively to relax contracted muscle fibers

**Reduce reliance on medications:** Both are considered a safe, natural, and effective therapy that may help reduce or eliminate the need for opioids and other analgesics, anti-inflammatories, and other medications that may have undesirable side effects.



*Alpha-Stim*® is a special waveform microcurrent device FDA cleared in the United States for anxiety, depression, insomnia and pain. Small clips placed on the ears act as the transmittal source to reset the nervous system back into the relaxing, calm, alpha state (AlphaStimForAnimals.com).



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There are some signs that can show up in your dog or cat when they are in pain. Just like people, some will hide it, while others are more obvious that something is wrong. If you are wondering whether or not your dog or cat is suffering, take this short quiz and find out how many common signs of pain your pet is exhibiting.

**MARK ONLY IF APPLIES**

*1 for mild or not very often, 2 for moderately, 3 for often or intense*

DOG PAIN QUIZ			
Lameness, abnormal gait		Playing less	Wobbly
Withdrawn, hiding		Less interested in going for a walk	Shifting weight off area of body
Reluctant to move		Change in mood, grumpy	Licking excessively an area of the body
Dislike or intolerance of handling		Hunched back or sway back	Restlessness; pacing
Overall activity less than normal		Groaning, moaning, grunting	Lower or tilted head or ears
Looks depressed		Weeping, red, cloudy or squinting eyes	Temperamental, yelp or growl at others
Hanging or tucked tail		Heavy panting, increased heart rate	Change in toileting habits
Decreased appetite		Change in appetite & type of food willing to eat	
Recent surgery, dental infection		Licking inanimate objects (can often be a sign of intestinal pain)	
SCORE: Number marked =		Number divided by 75 X 100 = %	

CAT PAIN QUIZ			
Lameness, abnormal gait		Recent surgery or dental infection	Weeping, red, cloudy or squinting eyes
Withdrawn, hiding		Flicking tail	Shifting weight off area of body
Reluctant to move		Change in mood, grumpy	Licking excessively an area of the body
Dislike or intolerance of handling		Hunched back or sway back	Temperamental, growl at others
Overall activity less than normal		Groaning, moaning, grunting	Change in toileting habits
Looks depressed		Change in appetite & type of food willing to eat	
SCORE: Number marked =		Number divided by 51 X 100 = %	