



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

Building a Better Body From Mouth to Bum

*Don't' have time to do a lot of reading?
Just want the bottom line?*

*Here are some tips to help get your dog to a
healthier state, no matter the age.*

AVA FRICK, DVM

**BUILDING A BETTER BODY
FROM MOUTH TO BUM
with**



Don't have time to do a lot of reading?

Just want the bottom line?

Here are some tips

to help get your dog to a healthier state,
no matter the age.

Ava Frick, DVM

© Integrative Veterinary Education, Inc. 2022

TABLE OF CONTENTS

1. Oral Care
2. Nose
3. Lungs
4. Heart
5. Liver, Gall Bladder
6. Digestion
7. Kidney, Urinary Bladder
8. Immune System
9. Skin and Ears
10. Back and Legs
11. The Driving Forces – Endocrine Glands
12. The Bum – Anal Sacs
13. Optimal Weight
14. Connecting UP



ORAL CARE

Health and hygiene begin in the mouth. The mouth is easy to ignore because dogs are typically not smiling and showing their teeth at us every day, but don't wait until there is dental disease to start doing something about it. Start young and be prophylactic.

1. **DIET:** Keeping the mouth free of tartar begins with the diet.

Avoid extruded kibble. Feed raw or balanced home cook recipes, freeze dried or air dried are also good options. If your life style means you need to use kibble for some meals (but please not all of the meals) then it should be baked.



Here is the list of Baked Kibble that is available in 2023:

BAKED KIBBLE COMPANIES (17)

- Lotus Oven Baked Dry Food
- Stella & Chewy's
- I and Love and You, Baked & Saucy Beef & Sweet Potatoes
- Carna4
- Honest Kitchen
- Jiminy's Good Grub
- Yumwoof Perfect Kibble
- Evolve Baked, small batch
- AvoDerm Oven-Baked Original Formula
- Wellness TruFood Baked Blend
- Leonard Powell Signature Series Oven-Baked Dinner
- Oven Baked Tradition™
- Darford Zero G Oven Baked Kibble
- Tiki - for small dogs and cats
- Ollie baked beef with sweet potatoes
- The Pet Gourmet – also 2 premixes (1 GF and 1 wheat free)
- Spot & Tango



FEEDING BAKED KIBBLE IS OPTIMAL OVER EXTRUDED DIETS

Extrusion processing adds to the inflammatory state of dogs and cats. This is the method used in over 99% of all the kibble diets currently on the market. Diet induced inflammation is supported by the Tissue Mineral Analysis research that I compiled and then was published in 2017. Extrusion is a large reason behind so much of the diabetes, obesity, cancer, heart and joint disease, including cruciate ligament tears.

Gelatinization is an exothermic reaction of starch that occurs when it is exposed to heat and moisture at time intervals. This reaction causes a disruption of the crystalline structure, absorption of water, swelling, and raises the accessibility for digestion by enzymes like amylase. It increases starch digestibility but when eaten also raises glucose in the blood. This can be a factor as to why dogs and cats fed diets in this form over years, especially when given no other whole real food options, become obese and diabetic.

There is a unique phenomenon that occurs with the cooking or processing of starch that makes it potentially indigestible and it is called Amylose-Lipid Complexation (A-LC). The A-LC is a function of heat, moisture, content, type of starch, type of lipid, and degree of gelatinization. In processing, amylose traps lipids. Starch gelatinization binds lipids to amylose, reducing free fat availability. This can be good for the product, as it lowers rancidity and extends the shelf life, but not good for the body.

When fresh meat versus meat meal is used in the food there is a much lower A-LC score. Fresh meat will produce only 0-20% A-LC. Unrendered fresh meat may be protected from thermal and mechanical conditioning, thereby preventing A-LC formation. The extrusion process of making kibble raises the A-LC 90-100%, while baked kibble tested was less than 60%.

2. DENTAL CHEWS and BONES: They can help especially if started early before the plaque has gotten way ahead of you. Avoid ones that are filled with sugars, coloring, and chemicals. I prefer raw bones and Yak. Allowing your dog to have them on a designated schedule each day can create a time for being focused on something other than you. And it gives them something to look forward to!

3. ORAL CARE PRODUCTS: Some dogs resist the size of a tooth brush and the pressure inside their mouth, especially when it is sore. I recommend using a Q-tip. Alternate brushing with either hydrogen peroxide, colloidal silver or using my Neem Dental Paste formula by saturating the Q-tip. Then going inside the mouth can be accomplished. You may find it is easiest when done without trying to look at every tooth. Visualize the tooth and gum and roll or rub along that juncture.

There are some sprays that can also be helpful. Here is what I dispense and recommend.



New Zealand Deer Velvet & Manuka Oral Spray – is the most natural and effective pet oral spray on the market. With all natural ingredients, caring for your pets' dental health has never been easier. Beneficial for use against stomatitis, gingivitis, bad breath, ulcers, post extractions.

The all-natural ingredients include:

- Manuka Hydrosol, Manuka Concentrate, Manuka Honey UMF 10+ – antibiotic and antibacterial properties, reduces inflammation, treats gingivitis
- Propolis – anti-inflammatory and antimicrobial properties
- Peppermint oil – antimicrobial properties and freshens breath
- Cinnamon Oil – decreases inflammation, increases circulation, fights viruses

Dr. Ava Frick's Neem Dental Paste Recipe – I use this recipe for myself and pets.

* Equal portions of organic neem powder [I purchase mine at BanyanBotanicals.com] and baking soda. I take a pill bottle and after pouring equal amounts of each, cap and shake to mix well.

* Add 5 to 10 drops of doTERRA essential oil Bergamot

* Add just enough Hydrogen Peroxide to make a paste. Be careful getting too much as it will expand. Stir.

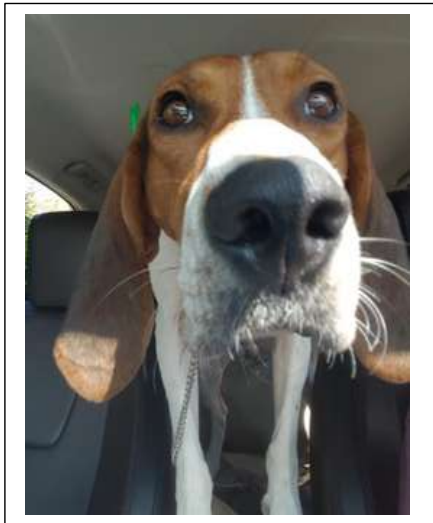
* Apply to a clean Q-tip, sponge, or brush and go at it!

* Repeat daily

Parsley is a great green to share with your dog. Chewing it freshens the breath and cleans the mouth. Make it a daily snack time treat.

4. Dentistry: I encourage good oral hygiene. Sometimes that means getting a really good dentistry performed by a dental specialist or your traditional veterinarian. Removing the excess plaque, bacteria, and any decaying teeth while under anesthesia can make a world of difference in your dog's breath. Other benefits include reducing pain, improving digestion, eliminating transference of microbes to other organs, and in the end, a happier pooch.

NOSE



A dog smells 10,000 times what we humans can! Keeping that nose comfortable is very important as it is the portal to much of the dog's sensory life. Or as I call it when we go for a w-a-l-k, "taking an olfactory journey." As dogs age we often find the old schnoz getting very crusty and irritated. It can develop excess layers that peel off leaving the underneath irritated. This is an omega 6 fatty acid deficiency. I have, for many years, successfully used [Black Current Seed Oil \(StandardProcess.com\)](https://www.standardprocess.com) to resolve this uncomfortable condition. It is not just because your dog is old. There is a reason for it and something can be done about it. The Black Currant Seed is an oil in a soft gel. It can be given orally or applied to the snout. Depending on how long the condition has existed allow at least 6 weeks to see a good response.

LUNGS

Lungs, in addition to being the transport system for getting oxygen into the blood, are also an organ of elimination. There are a few things you can do to improve the quality of your dogs' lungs and help prevent any disease from setting in.

1. Avoid walking in the city during rush hour traffic. The dog is close to the exhaust and takes in much more of those nasty fumes.
2. Do not use chemically scented plug-ins or other artificial perfumed sprays in the home.
3. No smoking around the dog. They get second hand smoke too!
4. Use a diffusing essential oil like [doTERRA On-Guard](#) or [Air-X](#) to cleanse the air.



Herbs that support lung function: Bibhitaki, Mullein, Cardamom, Tulsi, wild cherry bark, Amalaki, Licorice root, Vasaka leaf

HEART

Heart health begins with a clean mouth. The bacteria in the mouth have an affinity for the valves in the heart, especially in the presence of vitamin A deficiency. Getting, or better yet keeping, a clean healthy mouth is the first step to protecting the heart.

The biggest heart topic over the past 3 years has been about taurine deficiency. In 2012 there was an article in *VitaHound* titled: *Taurine Supplements are Usually Required in Present Day Dog Diets*. Yes, as far back as 2012 the word was out – no canine diet has adequate taurine to match the stress and inflammation that dogs deal with. And why do dogs have inflammation and stress? That fact I have been recognizing since 2005 by doing hair Tissue Mineral Analysis testing.

Inflammation and stress are related to adrenal gland function, aldosterone production, sodium retention, loss of potassium, tissue calcium, and magnesium levels, inadequate levels of choline, taurine, inositol, vitamin A and E. Basically, inadequate availability of whole food minerals, vitamins, and amino acids (especially taurine) lead to inflammation and inflammation precedes heart disease. In dogs with heart disease [other than congenital or genetic related], there are many potential factors preceding the onset that have been sneaking up undetected for quite a bit of time.

And if those dogs had been eating an archetype diet, like real unprocessed (anything but kibble here) meat containing food, it never would have happened. Why? Taurine is found naturally in milk, meat, fish, eggs, and sea vegetables such as kelp and seaweed. As for meat (not meat meal or by-products), mice have three times more taurine than chicken, next highest beef, followed distantly by lamb. Kelp is a good supplement source since it contains all 21 amino acids and is also rich in minerals and many vitamins. Chia Seeds also contain all the amino acids.

Nutrients known to be needed by or as protection for the ticker include:

Adding the needed **taurine** to your dog's diet is reasonably safe with a natural supplement. Dosages range from 200mg to 2000mg per day, best given 2 to 3 times a day. Cat foods already are supported with added taurine as this deficiency has been known to occur in cats for decades.

Vitamin E, calcium, magnesium, potassium, CoQ10, L-Carnitine, vitamin B2 – Riboflavin (for heart rate), vitamin B1 – Thiamin (protects against cardiac hypertrophy and bradycardia), pantothenic acid (helps with tachycardia), fish oil (to reduce cytokines)

Herbs that support the heart: Hawthorn (for conductivity), Arjuna (function, circulation, blood pressure), ginger, cardamom

Other heart support you can provide:

- Ylang Ylang is an essential oil that supports a normal heart rate
- Use supplements and herbs that improve oxygenation ([Standard Process Cataplex E2](#)) and support the adrenal glands, such as [Rehmannia](#) and [licorice](#).
- Reduce Stress – in the home and in your dog's daily routines. A little bit of stress reduction can go a long way to give the heart a break. Stress signals to the adrenal glands that one's life is in danger. That trigger then sets off a cascade of events, one of which is telling the heart to beat faster. While that works for a young dog outrunning danger, it can be the end of a good life for a geriatric.

Stress reduction methods can include:

- turning the lights down
- play calming music and relaxing sounds
- massage
 - o doTERRA essential oil blends in rollers called [Calmer](#) and [Rescue](#) can be applied topically. Or use [doTERRA Balance](#) with a diffuser.

LIVER AND GALL BLADDER

The liver has 1,500 jobs to do and there is not a test for each of them. Some of these jobs include making hormone precursors, regulating allergies by producing yakriton (a prehistamine the Japanese discovered in the 1920's), detoxification, and supporting all phases of digestion. While the liver and gall bladder are very much a part of the digestive system, I like to look at them separately.

Many may not be aware that anal sac issues are linked to a liver not being able to do all of its tasks, especially in this case, producing yakriton. Liver support may very well start in the stomach with needed enzymes, better amino acids, zinc, and signaling hormones letting the liver and gall bladder (and pancreas) know that food is on the way.

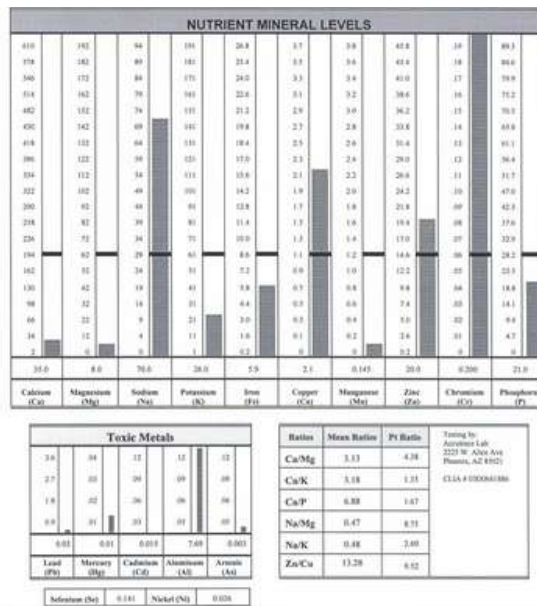
Irregular bowels, vomiting, anorexia, and bloating may be originating from liver and/or gall bladder distress. Certainly, any and all allergies have some kind of a liver connection at one level or another. "Standing with an arched back," while commonly a spinal issue needing an adjustment by a certified animal chiropractic doctor, can be because of a tender liver where gravity on the liver's suspensory ligament causes pain. The dog will stand that way to reduce the pull and pain on the liver ligament.

The liver makes bile, which helps break down fats for digestion and absorption. The bile is then stored in the gallbladder until it is needed during digestion. The bile helps to make the bowel movement firm. So, what does the liver do? Here is a list:

- Produces bile, which helps carry away waste and break down fats in the small intestine during digestion
- Makes certain proteins for blood plasma
- Makes cholesterol and special proteins to help carry fats through the body
- Stores and releases glucose as needed
- Processes hemoglobin to use its iron content (the liver stores iron)
- Changes harmful ammonia to urea (urea is one of the end products of protein metabolism that is excreted in the urine)
- Clears the blood of medicines and other harmful substances
- Regulates blood clotting
- Fights infections by making immune factors and removing bacteria from the bloodstream

Here is what you can do to help your dog's liver and gall bladder:

1. Feed a food that does not exceed 25% carbohydrates. The liver has to break them down and exceeding the body's natural load over years is added stress and overwork to the liver.
2. Avoid kibble foods with grains and legumes where fungi, like aflatoxins and molds, can be present.
3. Parasites and viruses peruse the liver and can set up camp there. Improve your dog's immune system and keep on some kind of an anti-parasitic program. All parasites will not be determined on a fecal test. That only works if it is a parasite belonging to canids where they are the end host and living in the digestive tract. Many other lost larvae belonging in other species can find their way into your dog's body and cause damage as they migrate. Use safe herbs like **Artemisinin (wormwood)**, **black walnut hulls**, and **oregano** on a rotating schedule.
4. Support the gut by improving a broad microbiome environment.
5. Have a hair **Tissue Mineral Analysis Test** done to determine what nutrients might be missing and heavy metals that can undermine liver health. See example graph below. (www.LifeExtendMethod.com)
6. Support liver and gall bladder function with herbs like **milk thistle**, **dandelion root**, **globe artichoke**, and **burdock**.
7. Give a good base nutrient liver combination product like **Standard Process Canine Hepatic Support**.



DIGESTION

The Digestive System is responsible for turning food into nutrients (which are converted into energy) and then discarding the waste. It is made up of different parts, each with its own responsibility: the mouth [teeth and parotid glands], esophagus, stomach, small intestine, large intestine, rectum and anus. The digestive system is also influenced by the performance of the pancreas (a gland), gall bladder and liver. It comprises up to 85% of the entire immune system.

Digestive organs reduce the food into absorbable parts using motion such as chewing, squeezing and mixing. There are digestive juices and enzymes produced in the stomach, pancreas and liver. Deficits within the digestive track due to poor or inadequate microbial populations, cell wall integrity, improper pH, and stress (causing reduced gut motility and function), are just some of the many alterations that can lead to GI distress and dysfunction.

Here are some of my recommendations:

1. Take my ***Ayurveda Dosha Quiz for Dogs*** to see what dosha predominates in your dog.

Then seasonally adjust the diet for that combination. (www.LifeExtendMethod.com)

2. Have a hair ***Tissue Mineral Analysis Test*** done to determine ~~what nutrients~~ might be missing. This test will also reveal what metabolic rate your dog's system is working under. That information can help in determining what is the best type of diet to feed in the way of kibble versus raw, versus cooked. (www.LifeExtendMethod.com)

3. Give a good base nutrient digestive combination product like [Standard Process Canine Enteric Support](#).

4. Support with enzymes and probiotics. I like [Vet Classic Protegrity EZ](#) and [Go Beyond Natural Inner Garden](#). Get the microbiome boosted! Every month it seems there is another aspect of how to encourage that good microflora production, so keep your options open.

5. More for the microbiome - Insects

Because insect protein has fiber, it can be beneficial for your dog's gut. In fact, cricket protein has been proven to be a prebiotic for dogs and may help to feed the microbiome.

6. **Chlorophyll** can be very soothing and restorative to irritated epithelial cells throughout the digestive tract. That is a reason why a dog eats grass, for the chlorophyll.
7. Reduce Stress – in the home and in your dog's daily routines. Stress signals to the adrenal glands that one's life is in danger. That trigger then sets off a cascade of events which include shutting down digestion. Because the last thing a body wants to do, when trying to save one's life, is to eat and digest. That would require moving blood circulation away from the muscles of the legs and heart and toward the gut.

Stress reduction methods can include turning the lights down, play calming music and relaxing sounds, and massage. doTERRA essential oil blends in rollers called *Calmer* and *Rescue* can be applied topically. Or use *doTERRA Balance* with a diffuser.

Herbs that support the Digestive System:

Select calming and protective herbs such as **chamomile, ginger, tangerine, slippery elm, fennel** and **Artemisinin**. These can be delivered as a tea that is added to the food, or in a powder or combination product that you like or is recommended by your integrative veterinarian or animal nutritionist.

Bilva promotes healthy solid stools.

Cardamom balances stomach acid levels.

Kutaja supports a healthy GI Tract and proper colon function.

KIDNEY AND URINARY BLADDER

The kidney and urinary bladder help eliminate liquid waste and extra fluid from the body.

They

also keep minerals (such as potassium, calcium, phosphorus, sodium) and water in balance.

This

balance is critical to keeping the nerves, muscles, and organs working properly. Kidney damage

affects the kidney's ability to filter the blood. It can also reduce the hematocrit of the blood.

The kidneys produce "erythropoietin factor" to signal the bone marrow to produce red blood cells. When the kidneys become diseased this is one of the jobs they cease to do, leading to anemia. Other jobs for the kidneys include; balance the body's fluids, remove liquid waste from

the body, eliminate toxins, and release hormones to regulate blood pressure, and keep bones strong.

As bodies age, the milage on the renal system takes a toll. Starting renal support before those blood test numbers rise can go a long way to sparing kidney function and avoiding early renal disease.

Here are some recommendations to help you navigate this:

1. Have a hair **Tissue Mineral Analysis Test** done to determine what nutrients might be missing or ones in excess that could affect the renal system. Toxic metals are high on this list, as the kidneys are an organ of elimination. This test will also reveal what metabolic rate your dog's system is working under. That information can help in determining what is the best type of diet to feed in the way of kibble versus raw, versus cooked. (www.LifeExtendMethod.com)
2. Improve the nutrient quality of food by including a good level of real food proteins.
3. Support the microbiome to prevent toxins from being reabsorbed into the blood system that then have to be eliminated via the kidneys.
4. Have a regular exercise routine, even if it is two short walks a day. Movement leads to circulation, a critical factor in preventing stagnation and helping the kidneys perfuse the blood and organs.
5. Give a good base nutrient renal combination product like [Standard Process Canine Renal Support](#).

Herbs that aid in aspects of kidney function include:

- **Chlorophyll** – to reduce toxins in the blood, build hemoglobin, support the mucosa
- **Kelp** and **sesame seed oil** – benefit red blood cell production
- **Dandelion leaves, Hydrangea** – general support

And Now the Bladder

Urinary Bladder – the holding vessel of what the kidneys are sending out, urine. Many dogs experience cystitis (bladder infection) during life. Antibiotics and anti-inflammatories are commonly prescribed. Herbs that can reduce the likelihood of infections and maintain a stable urinary bladder environment are **bilberry, cranberry, Rehmannia, Uva Ursi, Horsechestnut,** and **dandelion leaves.**

Aside from bladder infections, there are two other bladder related situations that I want to shed a little light on. First is the male prostate gland. It remains present throughout life, even in neutered males. And with age it can enlarge. Standard Process has a unique product to help; **Prost-X** can be the “go to” to reduce the size and resulting discomfort caused from an enlarged prostate and improve its function.

Now for the females, there is the bladder leakage associated with lowered estrogen levels as a result of early spaying. Aside from traditional methods, I have found some other approaches that have worked very well. This includes one or a combination of **Standard Process Symplex F, Ovex P, Ligaplex I,** and **MediHerb Cramplex.** Another is a homeopathic preparation by **BioActive** called **Estrogen**, it is a safe way to balance the missing estrogen hormones.

IMMUNE

The immune system is a complex network of special organs, cells, proteins and chemicals that defend the body from diseases. It detects and responds to a wide variety of pathogens, from viruses to parasites, as well as cancer cells and foreign objects like thorns, distinguishing them from the organism's own healthy tissue. In fact, every germ it has ever defeated is recorded to memory by the Immune System. By remembering germs and how to defeat them, it can destroy the germ quickly if it ever enters the body again. Up to 85% of the immune system begins in the gastrointestinal track, and there is a direct link between gut-immune-skin.

The lymphocytes are the most crucial part of the immune system because, as they are transported throughout the body by blood vessels, they patrol for foreigners that may be harmful to your dog's health. It is these powerful white blood cells that help the body fight off infection. B cells and T cells, two types of lymphocytes, work together to make this possible. There are two components to the immune system; the innate immune system provides a preconfigured response to broad groups of situations and stimuli. The adaptive immune system provides a tailored response to each stimulus by learning to recognize molecules it has previously encountered.

A weakened immune system may be seen as repeatedly being sick, chronic infections, allergic and autoimmune diseases. This problem could begin as early as in the womb, then be perpetuated by vitamin and mineral deficiencies, and poor nutrient quality (like only being fed extruded processed kibble for one's entire life). Stress, toxins, microbiome imbalance, a body pH that is not near 7.0, side effects of medications, and then the aging process where the endocrine glands begin to weaken, all can add to a weakened immune system.

Here are some recommendations to help you build a stronger immune system in your dog:

1. Have a hair **Tissue Mineral Analysis Test** done to determine what nutrients might be missing or ones in excess that could affect the immune system.
(www.LifeExtendMethod.com)
2. Improve the nutrient quality of food by including a good level of real food proteins.
3. Support the microbiome to expand the quantity and quality of those intestinal microbes.

4. Give a good base nutrient immune combination product like [Standard Process Canine Immune System Support](#).
5. **Transfer Factor** – ([Venjenz.com](#)) To communicate between cells, the immune system employs hormone-like signal substances; transfer factors are one class of such immune system communication substances. Transfer factors include both inducer/helper functions and regulator/suppressor functions and have been shown to respond in less than 24 hours. Transfer factors are not species-specific, thus transfer factors produced by a cow's immune system are just as effective in dogs as they are in a cow.



MICRONIZATION™ – The micronized liquid Canine Immune Formula bypasses the digestive tract to cross the blood brain barrier making our formula far more bioavailable. This is key in dogs with leaky gut and digestive absorptive difficulty.

Transfer Factor using Natural components from cow colostrum and bovine.

Aphanizomenon flos-aquae (AFA) activates dog's own natural killer cells to attack the harmful microorganisms attacking your dog and to boost the immune system, aid in wound healing, helps fight against heart disease and maximizes digestive efficacy.

Lemon Rind source of natural citric acid.

6. **Fermentable fiber (FOS)** increases T-helper cells and support GALT
7. **Mannan oligosaccharides** prevent binding of lectins to gut epithelial, Lymphocytes, IgA
8. **Vitamin B6/pyridoxine** for lymphocyte productions and antibody response
9. Minerals: **Calcium lactate** and **zinc** for general immune and skin, **choline** to support the thymus

Herbs that are supportive toward the Immune System include: **Echinacea**, **Cat's Claw**, **Devil's Claw**, **Astragalus**, **Andrographis (Kalmegh)**, and **St. John's Wort**.

SKIN AND EARS

Your dog's Integument comprises the fur, skin and associated sebaceous glands. The skin is the largest organ of the body. Dogs will turn over their skin every 3 weeks compared to humans which turn over every 4 weeks. Their fur grows out of the follicle in tufts while human hair will grow individually.

A healthy coat should be shiny and smooth, not brittle or coarse, and healthy skin should be supple and clear, not greasy, flaky, or bumpy. The quality of the fur and skin is a reflection of digestion and immune function. Ears are an extension of the skin and can be an early indicator of an alkaline pH that allows for growth of yeast and bacteria. Early on, this can be corrected with organic apple cider vinegar with mother. Later it may require other specific pH calcium supplementation to get it down to a 7.2 to 6.8 pH level. Those being **calcium lactate** or **calcium ammonia** in the most severe cases (Available as *Cal-Amo* by *Standard Process*.). Skin is an organ of excretion for toxins and things that need to get out of the body that may be seen as sores. The skin is also a reflection of endocrine function in the body.

When addressing the skin, focus must also be placed on the liver and digestion. Refer back to those systems for suggestion on what to do. Fish oil can also be helpful. My favorites are *Standard Process Tuna Omega-3 Chews*, and *VF Omega 3*, and *Nordic Naturals* or *Ultra Oil*. Feeding krill and sardines can provide some of the same benefits.

Herbs that help to target the skin are: *Albizia*, *Chinese Skullcap*, *Feverfew*, *Sarsaparilla*, *Cleavers*, *Yellow Dock* and *Astragalus*.

Anti-histamines may be prescribed to reduce the allergic reactions while the source is being determined. Standard Process concentrates the fatty liver extract yakriton, a pre-histamine, into a tablet called *Antronex*. When produced by the liver, it circulates and reduces the likelihood of an allergic reaction. I have seen many do quite well in preventing allergies by providing this missing liver extract.

Bathing can purge the skin of dirt and pollen as well as nourish it. I use and recommend *Tropiclean*[®]. Their grooming product ingredients are derived from naturally occurring raw

materials starting with the mild coconut cleanser and adding protective, nutritive, and soothing plants like papaya, aloe, pomegranate, and mango. All making it safer to give regular baths.

Those chronic ear infections can be helped by following the above recommendations. The severe ones can be resolved with Low Level Laser Therapy (LLLT). I never would have believed it if I hadn't seen it myself. The most horrible ears I'd ever seen being worn by a beagle-cocker mix. This was back in 2003. I had been using LLLT since 1998 when I designed the first LLLT Spinal Pads. As much as I appreciated the ability of light therapy to create healing, I was not sure it could resolve these ears. I sent the clients home with a LLLT Patch, now the [ReVitaVet](http://www.ReVitaVet.com) brand (www.ReVitaVet.com) for 20 minutes twice a day. Much to my surprise, in two weeks they were better. And by six weeks the ears had totally healed from what had been ailing the dog for years.



BACK AND LEGS

The quality of muscles, ligaments, tendons, and bones are 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. 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



2. 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. Use a low impact exercise program for the geriatric dogs with stroking and gentle left to right motion to improve balance. I have a body-zone directed collection, [Dog Stretching & Exercises](#) that includes many helpful exercise programs for all ages. (www.LifeExtendMethod.com)
3. Learn massage and have a time each week devoted to doing this on your dog. Even brushing can be a form of massage, invigorating the skin and moving circulation.
4. 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](#), [Northwest Naturals](#), [Raised Right](#), and [Chi Dog](#). You can create your own meals via [Dr. Judy Morgan's recipes](#) or visit BalanceIT.com.
5. 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](#), and [VetClassic ArthriEase-Gold powder](#).

Herbs for the Musculoskeletal System include:

- Inflammation – [Boswellia](#), [Ginger](#), [Celery seed](#), [Turmeric](#), [Curcumin](#)
Pain – [Frankincense](#), [Copaiba](#), [Corydalis](#)
- Tone veins, stamina, tissue repair – [Gotu Kola](#), [Horsechestnut](#)
- Bone and remodeling – [Kudzu root](#), [Black Cohosh](#)
- Maintain and support healthy joints & muscles – [Nettle leaf](#), [Kaishore Guggulu](#), [Yogaraj Guggulu](#)

At home devices that can further improve sore aging joints is The [ReVitaVet](http://www.revitavet.com) laser system (www.revitavet.com) and [Alpha-Stim®](http://www.alphastimforanimals.com) microcurrent device for pain (www.alphastimforanimals.com). My success in rehabilitation would not be what it is without them.



Alpha-Stim® is a special proprietary waveform microcurrent device FDA cleared for treating pain.



THE DRIVING FORCES – ENDOCRINE GLANDS

The endocrine system is made up of glands that impacts nearly all of the processes in your dog's body. These glands create and release hormones, which are chemicals that coordinate body function. These chemicals send signals through the blood to organs, skin, muscles, and other tissues, which tell your dog's body what to do. Sometimes glands produce too much or not enough of a hormone. This imbalance can cause health problems.

The endocrine system is made up of many glands:

- o Hypothalamus
- o Pituitary
- o Pineal
- o Thyroid
- o Parathyroid
- o Adrenal
- o Pancreas
- o Ovaries and Testes

The hypothalamus is located in the brain and it is the king to controlling the endocrine system. It uses information from the nervous system to determine when to tell other glands, including the pituitary gland, to produce hormones. The hypothalamus controls many processes, including mood, hunger and thirst, sleep patterns and sexual function.

The pituitary is a little gland, only about the size of a pea, but it has a big job. It functions like a thermostat controller: when hormone levels rise too much, it tells other glands to stop creating and releasing hormones; when hormone levels dip too much, it tells other glands to create and release more hormones. This process is called homeostasis (balance). The pituitary gland is in charge of many different functions, including how a body grows and is in constant communication with the thyroid, adrenals, and hypothalamus. It's located at the base of the brain. When you see a dog with "liver spots" as they call hyperpigmentation in the dermis, it is time to think pituitary malfunction because of inadequate nutrition to support the gland and age weakening. The ONLY thing that will lead to gluteal pads, that weight gain around the rear

end or excess accumulation of thickness between the low lumbar and pelvis, is a pituitary deficiency.

The thyroid is a butterfly-shaped gland in the front of the neck. It's responsible for metabolism (how energy is used) and is considered the generator of the body. Changes in skin integrity, development of warts and lipomas commonly originate from thyroid imbalances. Continuity of ligaments will weaken as tissue level of calcium has been deficient for years, which is also associated with development of a less-than-optimal thyroid function.

Parathyroids are four tiny glands, no larger than a grain of rice. They control the level of calcium in the body. For the heart, kidneys, bones and nervous system to work, the right amount of calcium must be available. This regulation is done with the assistance of the thyroid and kidneys.

The pineal gland manages sleep cycles by releasing two hormones; melatonin at night and serotonin in the morning.

The adrenal glands are located one on top of each kidney. The outer cortex produces cortisol and the middle produces aldosterone. The first is anti-inflammatory in its function and the latter inflammatory (which is not all bad as it signals for healing to commence). The adrenal glands are the body's first emergency system, responding to the 911 distress calls. They control metabolism, blood pressure, sexual development and response to stress.

The pancreas is also part of the endocrine system, and it plays a significant role in digestion. It makes a hormone called insulin that controls the level of sugar in the blood and enzymes to support digestion of fats, proteins, and starches.

Ovaries and testes are the remaining glands of the endocrine system. The loss of the ovaries and testes in spaying and neutering creates a gap in the balance of hormone signaling and sets up a cascade of events leading to chronic inflammation. This is especially concerning with early spay/neuter programs where those dog and cat bodies never get the benefit of any of those respective hormones.

It is impossible to have just 1 endocrine gland "off." They work as an orchestra. Thyroid "disease" is not just the thyroid. The hypothalamus, thalamus, pituitary, pineal, parathyroid, adrenals, and pancreas are also affected. The same is true when considering adrenal hyper or hypo function. We need to think globally.

Helping the endocrine can begin by taking these steps:

1. Have a hair **Tissue Mineral Analysis Test** done to determine what nutrients might be missing. This test will also reveal the status of the glandular function of the adrenal, thyroid and pituitary glands at the tissue level. Further enabling better guidance on nutritional balancing.
2. Give a good base nutrient digestive combination product like [Standard Process's Canine Adrenal Support](#) or [Canine Whole Body Support](#).
3. Reduce Stress – in the home and in your dog's daily routines. Stress signals to the adrenal glands that one's life is in danger. That trigger then sets off a cascade of events which include shutting down digestion. Because the last thing a body wants to do, when trying to save one's life, is to eat and digest. That would require moving blood circulation away from the muscles of the legs and heart and toward the gut.
Stress reduction methods can include turning the lights down, play calming music and relaxing sounds, and massage. doTERRA essential oil blends in rollers called [Calmer](#) and [Rescue](#) can be applied topically. Or use [doTERRA Balance](#) with a diffuser.
4. Support the endocrine glands with key minerals such as [calcium, magnesium and zinc](#).

Herbs that support thyroid gland function are: [Ashwaganda \(Withania\)](#), [Bacopa](#), [Bladderwack](#), [Coleus](#), [kelp](#), [Kanchanar Guggulu](#)

Herbs that support adrenal gland function are: [Licorice](#), [Rehmannia](#), [Rhodiola](#), [Schisandra](#), [Ginkgo](#)

THE BUM – ANAL SACS

Those vestiges of scent sacs can certainly give a good dog a run for the money! Humans actually have them too, only very minimal. (Don't ask me how I know.) When the duct leading from the anal sphincter to the sac gets plugged up, the contents continue to be produced. Now a walled off cave, the local neighborhood bacteria start to proliferate, more volume, more pressure, more pain. Oftentimes, if not caught early enough, the sac will erupt to the outside of the body, leaving an oozing open sore either at the 4 or 8 o'clock vicinity aside the anus. Once it bursts the pain subsides but the problem is not over.

Why does any of this happen in the first place? Here are some reasons:

- In obese dogs, the formed feces does not have enough contact at the sacs to put pressure on them to evacuate while defecating.
- With soft unformed to diarrhea type of BMs, the lack of shape has the same issue as in the obese.
- There's a problem in the liver department. Yes, I know it is a long way from the liver, but this is a fact. Anal sacs issues tell us that there is a glitch with some of the liver's many jobs.

So, what else can you do besides see your traditional veterinarian, getting antibiotics, maybe a pain reliever and a head cone?

1. At the onset of licking, irritation, or scooting do some **Epsom Salt Warm Compresses**. 1 teaspoon of Epsom salts to a cup of fairly warm water. Soak a wash cloth then apply it to the bum. The dog can sit on the washcloth or you spend some one-on-one time while you hold it for 10 to 15 minutes. Or if the dog is small, make a pan of Epsom salt water and let him sit in it. It is relaxing, comforting, relieves pressure, pulls out swelling, and helps to open the plugged duct. Do that twice a day for 3 to 5 days.
2. Back to the liver connection. I have spoken about allergies and the liver not making enough yakriton. [Antronex](#), from [Standard Process](#) is a great solution. Provides what is missing, help the liver out, and the "time to express the anal sac visits" to the groomer or vet will be a thing of the past, or at least become a rarity.

OPTIMAL WEIGHT

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.

Risk factors for gaining excessive weight include neutering, aging, inactivity, indoor lifestyle, and genetic predisposition. 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, and heart stress with circulatory malfunction.

Obesity is predominantly caused by over-consumption of calories, under-expenditure of energy, and improper nutrient balance (more carbohydrates in relation to the protein). The challenge with food labels for pets is that they do not report the percentage of carbohydrates in the diet. So how can you effectively shop for a lesser caloric food? At the end of this section, I will share with you how to do the math.

There is a common belief that protein restriction is helpful in older animals, yet no scientific evidence shows that reduced dietary protein is beneficial for the healthy older dog or cat. In fact, reduced protein diets for older pets may have adverse effects by contributing to the muscle loss that occurs with aging.

To successfully manage a weight reduction plan for your dog or cat, you should:

1. Have a hair **Tissue Mineral Analysis Test** done to determine the status of the endocrine glands, sugar handling, protein assimilation and to get a proper nutrient balancing in place. (www.LifeExtendMethod.com)
2. Feed a balanced grain-free diet. (For insightful information from a veterinarian regarding the effects of diet read www.dogtorj.com.)
3. Feed alone, away from other animals to reduce the incentive to eat fast. You may choose to put the food in a muffin pan or other food devices to further slow him/her down.
4. Continue to allow treats, as this has been a part of a good day for your dog for some time now. And the last thing we want is stress about no snacks! But, pick the snacks

wisely. Use freeze-dried or air-dried bits or cubes, real meat dehydrated, fresh fruits or steamed veggies.

5. Take my ***Ayurveda Dosha Quiz for Dogs*** to see what dosha predominates in your dog.

When you target the dog's Ayurveda metabolism type, optimal weight can be much easier to achieve. Then seasonally adjust the diet for that combination.

(www.LifeExtendMethod.com)

6. Initiate a home exercise routine, which for some may be gentle massage, range of motion, frequent but very short walks, and exercises using a ball. Balls are great for older pets and ones that have difficulty holding up their weight or tend to lie down rather than stand. It is a support that allows them some independence as they regain function.
7. Weigh in every two weeks and record body weight.
8. Have a weight-loss reassessment done starting monthly then working up to every 3 months as the program successfully progresses. This will include weight, pelvic and thoracic circumference measurements, nutrition adjustments, exercise evaluation, and behavioral improvements.
9. Keep a journal of everything. The exercise distance and/or time spent, what is fed, when and the weight and measurement changes.
10. Supplements that can help shift metabolism include: **Alpha Lipoic Acid** and **Acetyl L-Carnitine**. **Chitrak** is an Ayurveda herb that supports optimal weight management, helps liver function and digestion.

WEIGHT MEASURE SCORES:

WEIGHT – taken with a scale

CHEST AND WAIST CIRCUMFERENCE – It's not just the pounds, it is about dimension too. Use a tape measure to keep track of the changes around the chest and waist.

Record them in on a table template so that you can easily refer to the every-other-week changes. Then celebrate the losses!



CALCULATING THOSE CARBS

MEASURING CARBOHYDRATES: This requires you to enlist some math skills. Packaging labels give you protein, fat, ash, and fiber but not the carbohydrate content. Excess carbohydrates in the diet lead to overwork of the pancreas and liver, deprivation of essential B vitamins, obesity, and many chronic diseases. It is important that we know how many carbs our pets are consuming. There is a simple equation that will give you that answer when using dry food.

DRY FOOD: $100 - \% \text{ Protein} - \% \text{ Fat} - \% \text{ Ash} - \% \text{ Moisture} = \% \text{ Carbs}$

Example: $100 - 27\% \text{ protein} - 18\% \text{ fat} - 12\% \text{ moisture} = 43\% \text{ carbs}$

CANNED OR RAW FOOD: This requires two extra steps to convert the contents into dry and wet matter so it can be compared to the dry food, which is on a dry matter basis.

$100 - (\% \text{ Protein} + \% \text{ Fat} + \% \text{ Ash} + \% \text{ Moisture}) = \text{Wet Matter}$

$100 - \% \text{ Moisture} = \text{Dry Matter}$

$\text{Wet Matter} / \text{Dry Matter} = \% \text{ Carbs}$

EXAMPLE: $\text{Moisture } 70 + \text{Protein } 17 + \text{Ash } 2 + \text{Fat } 7 = 96$

$100 - 96 = 4\% \text{ wet matter } [4\% / 100 = 0.04]$

$100 - 70 (\% \text{ moisture}) = 30\% \text{ dry matter } [30 / 100 = 0.3]$

$0.04 / 0.3 = 0.134 \text{ or } 13\% \text{ Carbohydrates}$



Dover's Dandy Jerky

The best snack for our pooch friends, especially those who are a bit of a poofy pooch, is home-made dehydrated meat. No preservatives or artificial flavorings. No flour. And the best is no calorie counting required when given in small amounts. (Cats like this snack too!) Time to clean last year's venison out of the freezer to make space for the new deer trophy. Or head over to the meat shop and get some liver.

RECIPE:

*Meat (venison, beef, bison roast) or organs (lung, liver, spleen, kidney). Place on tray in freezer to firm up for easier cutting. Or if already frozen, defrost awhile. This should be slightly frozen so firm but not solid. This allows for it to easily be sliced thin.

*Lightly spread a cookie sheet with olive oil, sunflower oil, or walnut oil.

*Place the thin sliced organ or meat onto the cookie sheet, covering it. (Dover wanted those last 2 words added!)

*Sprinkle with your choice of natural mineral or sea salts [to support adrenal gland function], turmeric [to reduce inflammation],

paprika [iron for blood hemoglobin and

vitamin E for liver support and reduce inflammation],

or coriander [digestive support].



*Put into oven and bake at 150 degrees to dehydrate the meat or organ. 1# sliced thin requires 5 hours. Or use that dehydrator you have and follow directions.

This is 1# of liver.



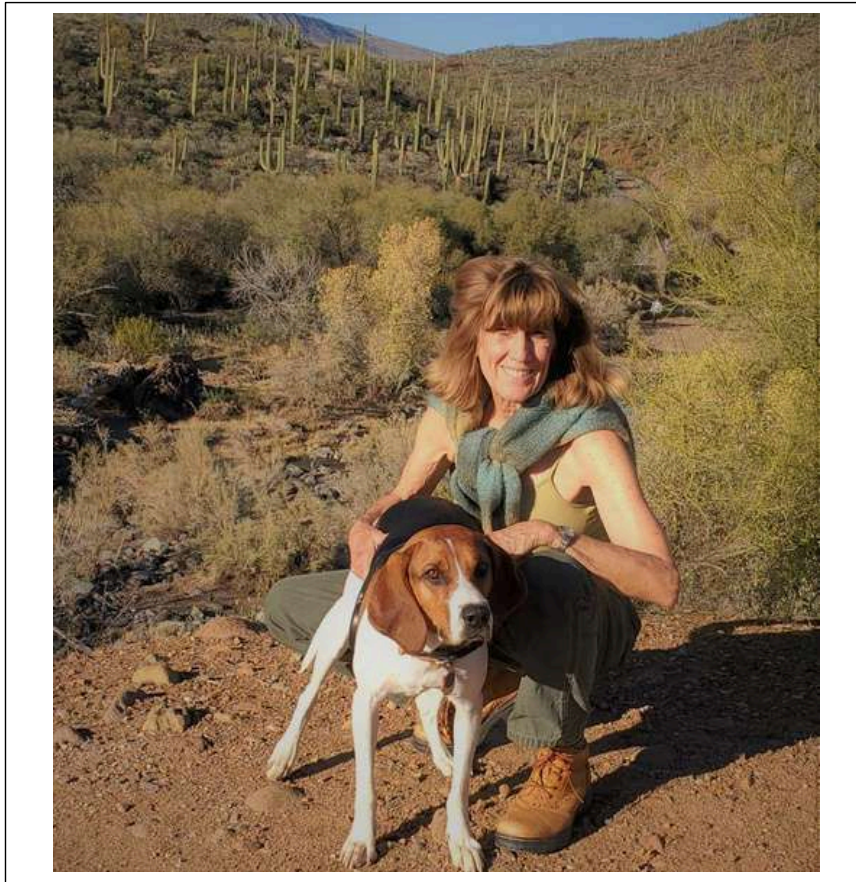
*Cool until no heat or moisture remains.
Break up into small bite size pieces. (Dover wanted me to add “Generous, larger than bite size pieces.” But I didn't. Shhh!)



*Store in a glass container with sealed lid. If you have thoroughly dehydrated it the jerky will keep for months. If in doubt, put in the refrigerator. Take a few pieces with you when going on walks, out for the day, or have ready when the pooch comes in from “doing ones’ business” outside!



Or use as Halloween and Holiday gifts wrapped in assorted gift-bags and ribbon.



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

© Integrative Veterinary Education, Inc. 2024