

# HOW TO HELP LOVED PETS...



## ***LIVE LONGER.***

A SPECIAL REPORT

By

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## AN INTRODUCTION

Thank you very much for downloading this special report on how to help your pet live longer. There isn't anything more important to loving pet owners, and I am happy to share the knowledge gained over 30 years in veterinary clinics, helping thousands of pets, with you.

This book, and my website [www.HelpingPetsLiveLonger.com](http://www.HelpingPetsLiveLonger.com), are the result of long hours of research, the frustration of not knowing where to turn with longevity questions, and the realization that optimal veterinary care can be difficult to find in some areas of the United States.

I wrote this for the pets of Point Reyes, CA, to Passadumkeag, ME... and everywhere in between. At heart, I am a healer... and I hope this book helps YOU heal your pet.

*Kevin Toman DVM*

If this book resonates with you, you can visit our website [www.HelpingPetsLiveLonger.com](http://www.HelpingPetsLiveLonger.com), and take 15% off your purchase with the code LONGEVITYBOOK at checkout. Just my gift to you.

## HELPING PETS LIVE LONGER

It shouldn't be that hard. But you need a guide, and that is what this book is designed to do – help you help your own pet to live their longest and best life.

In this book, I will give you the tactics and strategies based upon over 30 years in veterinary practices, along with cutting edge science from human longevity medicine.

You will learn everything from logical vaccine and dietary strategies to centuries-old supplements to the latest in longevity drugs... all with one goal – to help your pet, wherever you are.

And here's the most important part. **Everything we discuss in this book is *PROVEN***, by science and experience. There's a lot of ... smoke... on the internet, and lots of folks trying to sell you the latest and greatest in totally unproven products. That's not what you want, and it's not what your pet deserves.

Here are my TWO SPECIFIC GOALS with this book:

- 1) Help your pet live a longer and healthier life (see Fig 1, Dog Longevity)
- 2) To improve your pet's journey through cancer and other health challenges as they age.

Listen, you've probably gone to your veterinary clinic or feed store and asked how to help your pet live longer, only to be met with a blank stare and vague truisms about diet and exercise. Lots of folks stop there, and those are not the pet parents this book is written for. This book is written for the folks who want a plan. A plan based on logic and science, tailored to their own individual pet.

Hey, I started veterinary practice back in the dark ages of the 1900s just like most vets, giving a routine set of shots and the same meds to pretty much every pet, come what may. But here was the turning point for me.

I fell in love with older pets.

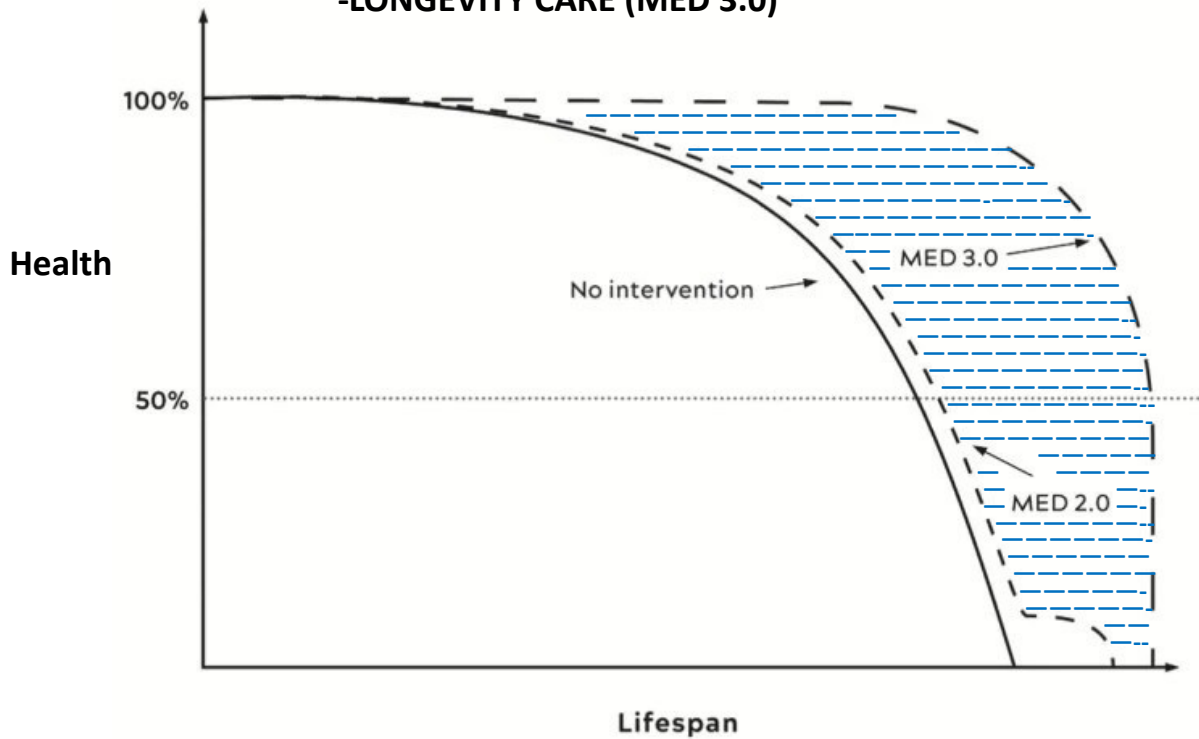
Older pets need help with pain and cancer and special diets, and there was nobody with that knowledge that I could turn to. So I built that knowledge, one patient and one book and one PubMed article at a time.

And now I'm sharing it with you. Let's get to work.

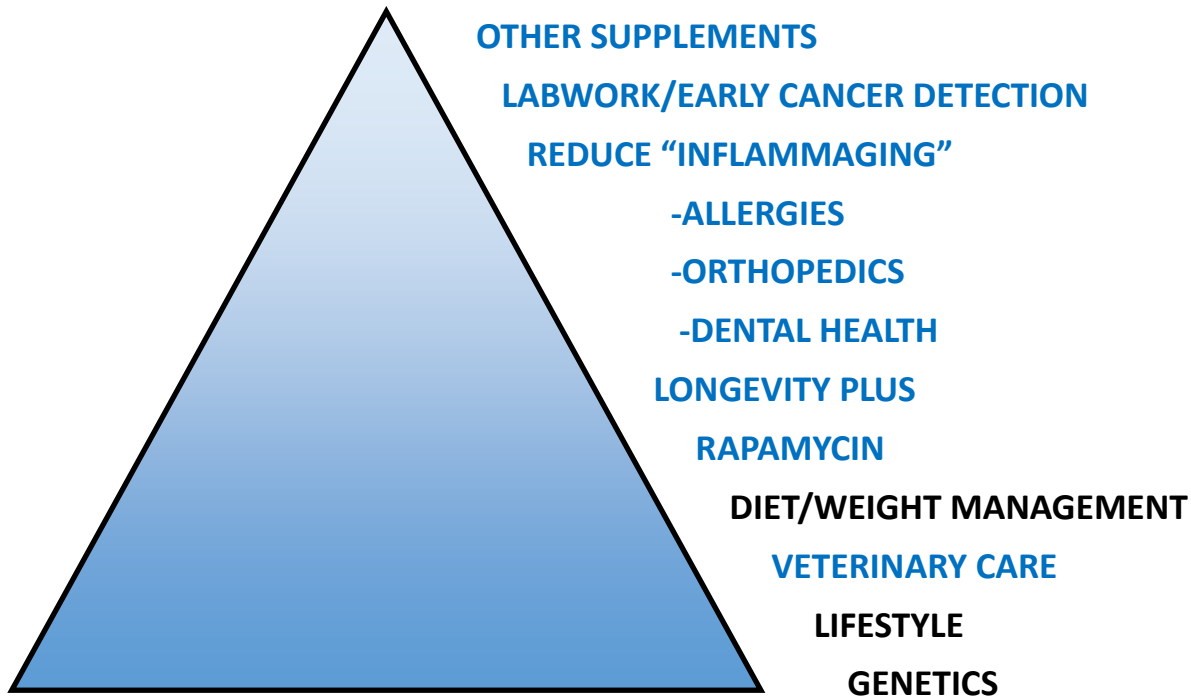


**FIGURE 1 — OUR GOAL IS TO INCREASE YOUR PET’S HEALTH SPAN**

- HEALTH SPAN IN NATURE (SOLID LINE)
- TRADITIONAL VETERINARY CARE (MED 2.0)
- LONGEVITY CARE (MED 3.0)



**FIGURE 2 — LONGEVITY FACTORS FOR YOUR PET. I CAN HELP YOU WITH THESE**



## HOW TO HELP YOUR PET LIVE LONGER

As a veterinarian for 30 years, there is nothing more important to me than helping pets live happier and longer. That's why I practice medicine, and that's why I began [NaturalPet.Health](#). I am passionate about this, so welcome to our little tribe.

You'll find that I try not to waste your time, so here we go with the **TWELVE PROVEN WAYS TO INCREASE YOUR DOG's LIFESPAN.**

In this chapter we're going to get serious about the factors that control how long your pet will live. Some we can control, some we can't... but you should be aware of every one of them.

So that this doesn't become the world's longest download, here's a sentence on each of those topics. If you want more info, let me know... because as some of you know, I can talk about this stuff for hours. Here we go, from the bottom up.

1) **GENETICS:** The most important key to longevity. Simple facts: About half of all cancer is genetic. Small dogs live longer. Heritable diseases like hip dysplasia or degenerative myelopathy shorten life... but you can avoid them just by testing.

2) **FIND A CARING AND SMART VETERINARIAN TO PARTNER WITH.** Some vets are great, some not so much... just like every other profession. Find one who will listen to you and who will customize their care to your needs.

3) **DON'T OVER-VACCINATE YOUR PET.** When I went through vet school, I was told that pets needed annual vaccines. That was wrong; VETS needed annual vaccines for income. Now most vaccines are effective for 3-7 years. Over-vaccinating your pet over-stimulates their immune system, increasing the odds of immune cancers like lymphoma and mast cell tumors.

4) **INFLAMMATION, PART A: FAT PETS DIE YOUNG.** Listen, I am a firm believer in spoiling our pets as much as possible. But every extra pound of their weight increases the odds of a) cancer, b) arthritis, and c) diabetes.

5) **INFLAMMATION, PART B: NOT JUST A WHITER SMILE.** For dogs under 20 lbs and cats, dental disease is the most common source of inflammation. Fact: untreated periodontal disease not only causes daily pain, but will reduce your pet's lifespan by up to 15%. This can ONLY be solved with an anesthetic dental which

includes radiographs of every tooth, and treatment or extraction of any diseased teeth.

6) **INFLAMMATION, PART C: NOBODY SHOULD HURT.** For dogs over 20 lbs, spinal or joint arthritis is the usual culprit causing inflammation. To help prevent painful arthritis...

- Play smart—minimize jumping, twisting, and uneven ground
- Avoid slips and falls—carpet and grass are better than hardwood and tile
- Stop making your pet jump into and out of the car, or onto furniture—these jumps add up over time
- Spoil your pet, but keep them thin
- Use the right supplements. Our [Longevity Plus](#) contains advanced curcumin and Boswellia, our [Transcend](#) contains the potent UC-II, proven to reduce joint pain and inflammation
- Oh, by the way – glucosamine and chondroitin don't work.

7) **INFLAMMATION, PART D: ALLERGIES ARE NOT JUST A NUISANCE.**

We have a whole blog post just on allergies. Pay attention if you want your pet to live their longest.

8) **CURCUMIN.** *The single best natural supplement for life extension, human or pet.* Learn more on [PubMed](#) or [Google Scholar](#), then check our [Longevity Plus](#) out.

9) **ACARBOSE** —REDUCING BLOOD SUGAR AND FIGHTING CANCER, part A  
One of only 7 drugs proven to increase longevity in the NIA ITP studies.

10) **METFORMIN**—REDUCING BLOOD SUGAR AND FIGHTING CANCER, part B;  
Helping heart disease

11) **RAPAMYCIN** -- Proven to increase lifespan in every species studied to date, rapamycin also reduces cancer risk, minimizes pain, and helps heart disease. Cornerstone of The Dog Aging Project. What's not to like? HPLL is the only online source for [rapamycin for dogs](#)... and [cats](#).

**12) USE THE RIGHT SUPPLEMENTS.** There's a lot of .... BS ... in the supplement market, and a lot of folks trying to make money by selling it to you. If it's not supported by science, don't risk it. From Ashwagandha to senolytics, I can help you... so email me with your questions.

**SPEAKING OF THE NIA ITP STUDIES....**

If you're into longevity research, there are six letters that have big implications for all of us in the longevity tribe. Those 6 letters are **NIA ITP**.

What do they stand for? **National Institute on Aging Interventional Testing Program**.

And here's why they are significant. The NIA ITPs are a set of rigorous tests of a wide variety of drugs and supplements on mice in multiple test sites. Basically, they do everything they can to eliminate all the BS and testing artifacts that can skew drug/supplement testing one way or another. [Learn more at their website here.](#)

And here's what they found. Literally dozens of drugs and supplements failed to have any benefit on longevity. This includes some big names like metformin, resveratrol, and fish oil.

**But the NIA ITP protocol has proven SEVEN DRUGS THAT WILL INCREASE LIFESPAN.** Without further ado....

**RAPAMYCIN** in both males and females, greater effect in females

**ACARBOSE** in both males and females, greater effect in males

**ASPIRIN** in males only

CANAGLIFLOZIN in males only

17 ALPHA ESTRADIOL (17AE) in males only

... and a couple that I had never even heard of, Nordihydrogualeic acid (NDGA) and Protandim, both in males only.

Here's what's cool about that. Because these drugs all act in different ways, it tells us that there are potentially MANY ways to influence lifespan and aging. Rapamycin acts via the mTOR pathway, as an example, while acarbose alters the gut microflora and reduces blood sugar spikes. Aspirin is an anti-inflammatory, while 17AE is a sex hormone that helps protect nerve function.

The three drugs that are potentially most useful for our pets are our old pal rapamycin, acarbose, and aspirin. All have a proven track record of safety in our pets, although I will say that I have seen some dandy cases of GI ulceration due to aspirin.

Here's one thing to remember. These strategies can also help YOU.

**AND IN THE... "WE'LL SEE"... CATEGORY**



There has recently been a lot of buzz about a biotech company named [LOYAL](#) and their well-publicized effort to develop a longevity drug for dogs. Let's take a little closer look.

First, a primer on the SCIENCE around longevity, for both us humans and the pets we love. And the first question to ask is how do we MEASURE the benefit of longevity drugs like LOYAL's LOY-001 or, for that matter, rapamycin? The answer? We can't. At least for now.

Hey, if we're diabetic we measure our blood sugar. If we have cholesterol issues, we measure our blood lipids. But there is no blood test that accurately charts longevity in either humans or pets, and thus there is no way to measure the benefits of a drug that we take (or give to our pets) for longevity.

There are literally billions of dollars being spent on this question in human medicine, and there have been a number of solutions proposed over the years. The current favorite is measuring [DNA methylation](#), aka the Methylation Clock.

As an aside, none of this diminishes the acceptance of [RAPAMYCIN](#) for longevity, due to its proven benefit of extending lifespan in every species studied to date, including the [Interventions Testing Program](#) sponsored by the NIH.

But back to LOYAL.

LOYAL is working to commercialize their injectable drug, currently known as LOY-001. This is not going to happen soon -- according to their website, no sooner than 2026.

How does LOY-001 benefit aging? Well, see above -- we can't measure that directly. LOYAL believes that LOY-001 can reduce a hormone called IGF-1. While all of us-- human or dog - - need IGF-1 early in life, excessive IGF-1 in older individuals is currently thought to increase cancer risk.

Because large dogs are more prone than small dogs to develop cancer, ***LOYAL's hypothesis is that LOY-001 can add to the lifespan of large dogs by reducing IGF-1 and thus potentially reducing cancer.***

And I'm all for it. Anything that is proven to reduce the heartbreak of cancer in our pets is wonderful. It's just that ***LOYAL has gotten a little far out over its skis, in that the studies are ongoing and release is at least several years off.***

However, you can act now.

**If you want to reduce cancer risk in your pet by reducing IGF-1, you don't need to wait. You can act now. Here are the things PROVEN to reduce IGF-1 in both humans and pets:**

- WEIGHT MINIMIZATION**
- EXERCISE**
- LOW PROTEIN DIETS**
- CALORIC RESTRICTION**

**Of course, we've known about these things for a while. They're just not as sexy as a new drug.**

## DOG VACCINES 101

In this chapter we'll chat about the vaccines we give -- or are told to give -- our dogs. Why is this such a big deal? Because it has health implications – pro AND con—for pets, and financial ramifications for your vet.

First, I want to give you some perspective on the veterinary BUSINESS. When I went through vet school way back when, we were taught that every pet should be given all vaccines once a year... because that was the only way we could get clients in the door.

You should also understand that veterinary PROFITS are under siege right now. When I was in practice, pharmacy counted for about 25% of our profit and diets accounted for another 8% or so. That profit has been hammered by online pharmacies, Chewy, etc. The increase in specialty and vaccine clinics have further drained the pond for small veterinary practices. Honestly, it's pretty tough to make a decent profit for many vets right now. The bottom line? Vets have two reasons for suggesting vaccines for your pets. One is your pet's health... and the other is financial.

Here's the deal. I'm not against vaccines. I am one of the old farts that went through the original parvo outbreak, where pretty much EVERY dog that got it died. I have also seen plenty of heartbreaking distemper cases coming off the Native American reservations in northern AZ. Heck, I even had to go through the 32 shot rabies protocol back in the day... talk about a sore arm!! **These are all examples that prove vaccines work to protect us and our dogs.** This PARTICULARLY applies to our pups, who should get a full round of puppy vaccines at 8-12-16 weeks of age.

But here's the rub. Vaccines are known to contribute to some health issues, and at the extreme can cause fatal skin cancer in our cats. I've done that too.

**Here's what I think. EVERY PET SHOULD GET VACCINES... BASED UPON THE PET'S RISKS. Not because of the ten bucks a vet makes, and not because you read about it online.**

So here's a little chalk talk on dog vaccines.

1) **RABIES** -- Rabies vaccines are mandated by virtually ALL states and ALL cities. For good reason. If your pet is bitten by a rabid animal and in turn licks or bites you... both of you will die. So think of rabies vaccines as life insurance, and cheap at that. Now, what are the chances that an urban poodle will run into a rabid animal? Admittedly, not high. You can draw rabies titers on your pet for a pretty penny, but it will NOT change the bureaucratic rules around rabies vaccination. They are what they are. I should also mention that your vet is required to report your pet's rabies vaccine to the city/state, etc.

2) **DHPP** -- or Distemper/Hepatitis/Parainfluenza/Parvo vaccines. Unless you live on the rez or in isolated other areas, the real value of this vaccine is in the PARVO protection. Your dog can get parvo by sniffing or licking at another dog's vomit or poop... because that's what dogs do. This vaccine is ESPECIALLY important for pups.

What most folks don't know... and some vets forget for whatever reason... is that in a mature dog who has had DHPP vaccines as recommended through puppyhood and the first year... **THIS PROTECTION LASTS FOR 5-7 YEARS.** Not one year, not three years...

The other FACT is that parvo is a disease that can ONLY be spread as mentioned above. If your dog is isolated from other dogs (and coyotes, etc) -- really and truly isolated -- they will never get parvo and don't need to be vaccinated. But... what happens if you need to board them, or if you have to take them to a vet? Yes, I have seen healthy dogs contract parvo at the vet's. Sucks.

Here's my recommendation. Vaccinate your pups thoroughly, and repeat those vaccines at a year old. Then don't worry about it for five years, unless your pet is around a LOT of other dogs. You can check their protection with blood titers.

3) **KENNEL COUGH**, or Bordatella. Not bordello, folks. That will be covered in a different newsletter :). Kennel cough is essentially a dog cold, and just like our colds it is caused by a variety of different bugs. Our current Kennel Cough vaccines PROTECT AGAINST SOME, BUT NOT ALL, of those causes. Also, the vaccine only lasts at high levels for **3-4 months** so if your pet goes to day care or is on the show circuit, they really should be vaccinated quarterly. **If your dog is not around any "strange dogs", they DO NOT NEED this vaccine.** This vaccine is almost always given by dribbling into your pet's nostrils. The good news is that this creates NO potential adverse effects, as far as I know. The bad news is that our dogs hate it.

4) **LEPTOSPIROSIS:** Lepto is a bacterial disease transmitted, most often, by drinking someone else's urine. Usually that's our pets drinking or otherwise contacting contaminated water in a pond or stream, but I could tell you a not so funny story about triathlon swimmers in Lake Michigan. Lepto makes pets and humans very sick, and is nothing to fool around with... **if your pet is exposed to water.** Swimmers and beach dogs, this is you. Chihuahuas in their mom's arms... not so much.

5) **LYME:** Lyme disease is another one that's not much fun for humans or pets. If you live in an endemic area, it's a good idea to get your dog vaccinated. Another approach is to use tick preventives and to avoid the brushy areas that ticks hang out, in which case you may not need the vaccine after all. The Lyme vaccine is considered a "hot" vaccine that causes more than its share of side effects, so if you are not in an endemic area I would sincerely avoid it.

**Side note: *It generally takes 48 hours for an embedded tick to transmit Lyme disease. Remove or kill a tick before that window closes and you're good. True for***

*us, true for our pets.*

**6) INFLUENZA:** Also known in the vet world as the Merck disease, since they are the vaccine manufacturer who has widely publicized this disease. Some, like me, will say that they VASTLY overestimate its spread and severity. **Unless your pet is continually exposed to many other dogs (show dogs, day care, etc)... you just don't need this.**

Why is a schmoe like me encouraging you to think about what vaccines your pet REALLY needs, instead of what your vet or Dr. Google suggest? For one thing, I have no economic interest one way or the other (although, honestly, this is the same approach I used when I was in practice).

The other, bigger, concern is that vaccines are designed to stimulate your pet's immune system. What pets don't need that? Pets with allergies. Pets at risk of immune-related cancer like lymphoma. Pets at risk for autoimmune disease, like many Arctic breeds. That's a lot of dogs.

**THE BOTTOM LINE: IF THE RISKS ARE REAL FOR YOUR SPECIFIC PET IN YOUR SPECIFIC AREA WITH THEIR SPECIFIC LIFESTYLE, THEN ABSOLUTELY VACCINATE.** If not...

## ALLERGIES

Guess what the most common reason for pets walking through a vet's door is? That's right, skin problems. Here's what you need to know about your pet's itch before that visit... or maybe we can even head that visit off at the pass for you. Here we go.

### Here Are the Symptoms of Allergies in Dogs:

- The most common symptom of allergies in dogs is itching/scratching, with resultant skin inflammation and infection.
- If your pet is inhaling something they are allergic to, you may see both
  - Sneezing
  - Reverse Sneezing (kind of a snorting/honking inhalation)
  - You generally will NOT see coughing with allergies, unless they are so bad that they create a secondary pneumonia.
- Dietary allergies can create GI symptoms like vomiting, diarrhea, and dog farts.

**Why Is My Dog Itching?** Here's a summary of causes for you. Learn more below.

- Fleas and Flea Allergies
- Environmental Allergies to pollens, mold, dust mites, etc.
- Dry Skin
- Atopy
- Skin Infections
- Dietary Allergies

We'll cover these in more detail below.

### Home Remedies to Help Itchy Pets

- Antihistamines like Zyrtec (1 mg per 2 lbs body weight given once daily) or Benadryl (1 mg per lb given twice daily) will help 30-40% of dogs.
- [LONGEVITY PLUS](#) can help you reduce your pet's itch... naturally.
- Gentle shampoos (aloe/oatmeal are great) in lukewarm, but not hot, water rinses. Make SURE you get all the suds off your pet, or else!!
- Coconut oil or fish oil in the diet to help soothe and moisturize the skin.
- Topical OTC meds like cortisone or NeoSporin ointments on irritated areas,
- Elizabethan collars to both distract your pet and prevent them from making things worse by chewing.
- Bandage a hind paw, if needed, to distract your pet and prevent them from making things worse by scratching.

## How Your Vet Can SOLVE Your Pet's Itch

- An exam and tests to figure out exactly why your pet is itching.
  - Your veterinarian can evaluate your pet's overall health and do blood tests to determine what your pet is allergic to, with over 90% accuracy.
  - The best allergy labs for blood tests are [VARL](#) and [HESKA](#)
  - A veterinary dermatologist can do skin tests to determine what environmental allergies your pet has
  - If you suspect dietary allergies, the blood tests mentioned above are about 70% accurate but dietary restriction trials remain the most accurate way to solve your pet's dietary allergies. More on that below.
- Desensitization to your pet's allergens, either oral or injectable, with immunotherapy. This is effective in about 70% of pets, and is ABSOLUTELY something you should think about... especially with younger pets.
- Effective flea and tick prevention
- Beginning aggressive treatment right away -- injections and bathing
- Antibiotics to control skin infections, whether a primary issue or due to your pet's chewing.
- Medications to reduce your pet's itch:

-Prednisone is the old kid on the block, cheap and very effective but comes with some side effects.

-[Apoquel](#) is a very potent immune suppressant that can solve your pet's itch within a day or two.

-[Cytopoint](#) injections are game-changers for dogs with atopy, and help some dogs with allergies as well.

## LET'S GET SERIOUS ABOUT THE CAUSES OF YOUR PET'S ITCH.

### 1) FLEAS

- Probably the single most common reason for pets' itch nationwide
- **IF YOUR PET IS CHEWING OVER THEIR TAIL, IT'S SIMPLE: THEY HAVE FLEA OR A FLEA ALLERGY. GUARANTEED.**
- Flea allergies actually mean that your pet is allergic to the flea's saliva. Flea allergies can be very frustrating to treat because just ONE flea bite can cause months of itching. Because most flea products – prescription or OTC – only work when a flea bites your pet and ingests the medication, even the best flea meds may not prevent flea allergy symptoms in an allergic pet.
- Sadly, "natural" flea preventives do NOT work for your pet. You need the good stuff, and your vet can help you choose.
- Remember that **FOR EVERY FLEA FOUND ON YOUR PET THERE ARE 100 IN THEIR ENVIRONMENT, BOTH INSIDE YOUR HOME AND OUTSIDE.**
- Fleas hang out in shade and humidity, like grass or carpet. They don't like smooth surfaces like tile, hardwood, or concrete.

## 2) ENVIRONMENTAL ALLERGIES

- Your pet can be allergic to many things in their environment, both inside and out. I have seen pets allergic to detergents and carpet cleaners, so beware.
- If their itch is seasonal, usually it is due to a plant or pollen allergy.
- If it's an outside allergen, you can minimize it by wiping your pet down with a wet towel after they go outside.
- Inside allergens (dust mites, indoor plants, etc) can be reduced with a HEPA air filtration system.
- Your vet can diagnose environmental allergies with [blood tests](#), and hyposensitization works about 60-70% of the time.

## 3) DRY SKIN

- Dry skin can be caused by diet or by a pet's environment.
- Omega 3 fatty acids will solve this
- Moisturizing shampoos can also be a big help.

## 4) ATOPY

- Atopy is a genetic disease that results in a defective skin barrier, so that things that normally don't penetrate the skin now do in atopic dogs. This exposes their immune system to ALL sorts of challenges, and a lot of itch.
- Cytopoint injections are GAME-CHANGERS for dogs with atopy, but generally don't work for "regular allergies".
- Topical medications (ointments and wipes) from your vet can help improve the skin barrier for your pet with atopy.

## 5) SKIN INFECTIONS

- Signs of a skin infection are redness, pus, and smell.
- Skin infections can be a stand-alone problem causing itch, but **EVERY OTHER CAUSE OF ITCH WILL EVENTUALLY CAUSE A SKIN INFECTION AS YOUR PET BITES AND CHEWS AT THEMSELVES.**
- You can minimize chewing with an E-collar and minimize scratching by bandaging a hind foot.
- Your vet can help you choose the best antibiotics and anti-bacterial shampoos.
- For chronic infections, your vet may have to do a culture and sensitivity test to learn what bugs are present and how best to kill them.

## 6) DIETARY ALLERGIES

What's the big deal, you ask? Well, treating dietary allergies in our pets is a Billion (with a B) dollar industry between vets and diet manufacturers, which makes it important to them. For your pet, it can mean the difference between comfort and around the clock itch.

And for you, it can mean dog farts and diarrhea. Interested now?



## **WHAT ARE THE SYMPTOMS OF DIETARY ALLERGIES?**

**-EAR INFECTIONS:** Really. If it's one ear, it's an ear problem. If both ears are inflamed, about 70% of the time it's a dietary allergy.

**-ITCHY SKIN** (Usually the head and neck, but not always) **AND PAWS**

**-GI ISSUES** ranging from deadly farts to vomiting and diarrhea.

And here is the biggest misconception for owners. ***Dietary allergies are NOT restricted to a "new food". Your pet can develop an allergy to something that you have been feeding them for months to years without a problem.***

How does your vet diagnose dietary allergies?

- 1) A physical exam to help rule out other causes of ear/skin/GI symptoms. This is ALWAYS the way to start.
- 2) You and your vet can consider blood testing for dietary allergies. Blood tests for other types of allergies are pretty darned accurate, but blood tests for dietary allergies are NOT anywhere close to 100% accurate... yet.
- 3) **The BEST way to diagnose dietary allergies is with dietary restriction trials, which are a nuisance. Sad but true.**

***Why is dietary restriction such a pain?***

***-Because it generally takes 8-12 weeks to see positive results, and...***

***-During this time, a pet can ONLY have the specified diet. Not any other treats, not any other milkbones, not any table scraps. Nothing else. That is harder than you think.***

***What are pets most allergic to?***

***-About 80% of the time, it's the meat in the diet.***

***-Beef products are the SINGLE most common allergen to pets***

***-About 20% of the time, it can be the grains or other ingredients in a diet.***

Here's kind of a funny story. I practiced for many years in Colorado mountain towns. One day a cat was brought in with obvious self trauma to its head and ears -- scratch marks on the head, blood on the claws. This was an outside cat who made a living killing gophers and other rodents on the ranch. I gave him steroids and antibiotics, which is what vets do when they are scratching their own heads, and he improved... for a while. When he relapsed, I suggested confining him to the laundry area for a couple weeks, and the symptoms went away. Turns out he was allergic to gopher meat. His symptoms disappeared when he was confined and fed "regular food", but when we tested our theory by giving him a gopher that had been squashed by a car, he went off like a firecracker. The owner made him an inside only cat, and he lived happily ever after.

OK, where was I? **So if you think (or tests show) that your pet is allergic to a diet, what do you do now?**

- 1) You take your best guess at the offending allergen. Let's use beef, for this example.
- 2) You can't use other red meats like bison or venison, because they are too antigenically similar. Same thing holds true for turkey and chicken, by the way -- poultry is generally poultry. So you look around and here are your choices:
  - a) Hypoallergenic diets from your vet. Expensive, and explained in more detail below.
  - b) Prescription diets containing meats that your pet has never seen before -- kangaroo, rabbit, mink, alligator. Yes, really.
  - c) You can home cook using single meat/single veggie diets -- eg if you think your pet is allergic to beef, feed a diet consisting ONLY of chicken and peas. Longer term we'd want to get that balanced, but that's a story for a different day.
- 3) The only treats your pet can have are the same ingredients as the diet. If your pet is on a dry special diet, I generally recommend soaking a few kibbles of the same food in water and then glomming them together and baking them off to form cookies. **NOTHING ELSE!!**
- 4) And the best part? This is how you spend the next 3 months of your life. If it works, great. If it doesn't, you pick another allergen and away you go.

Here are THREE things you should know about diets for pet with dietary allergies:

**1) You CANNOT rely upon OTC diets from the grocery store to help you, because almost all are cross-contaminated by other meats or veggies.** They may SAY that they are a salmon/sweet potato diet, but they likely have trace amounts of beef, carrots, or whatever in them.

**2) Hypoallergenic diets (Z/D, etc) from your vet are PRETTY good, but not 100%, and are very expensive.** Why? Because the principle behind them is that an allergen can be recognized as a problem by your pet's GI immune system ONLY if it is a certain size, expressed as Daltons or molecular weight. This is known as the antigenic threshold. Your vet's hypoallergenic diets have been hydrolyzed (ie, broken down) below that antigenic threshold. That's why they are so expensive.

**And 3), in its own little paragraph because this is important.** While dog farts are not much fun, there is a much larger risk with chronic dietary allergies in your pet. If these allergies go untreated and unsolved, odds are high that your pet will end up with Inflammatory Bowel Disease, or IBD. This is not a fun disease to deal with. Ask a friend with Crohn's disease and you'll understand.

**What would I do, if I suspected dietary allergies in my pet?** First, I'd work with the best vet around to make sure that I wasn't dealing with anything else. Then I'd either home cook for them in large batches that I would then freeze, or I would use a prescription diet like Blue

Buffalo Kangaroo. I believe that Blue Buffalo prescription diets are in general better than Science Diet or Royal Canin, but we can talk about that later.

## THE PAINFUL PET

Dogs and cats are amazing athletes. Try and replicate their jumping and speed, and you will see what I mean. But the stresses and strains placed on their joints and spine add up over the years, and most pets are affected by arthritis by the time they are 7 years old. This means that for most pets, over half their life is spent in pain... and we need to help them with that.

Simply put, keeping our pets comfortable as they age should be the single most important thing that we do as pet owners. And, oh, by the way, the inflammation due to arthritis will shorten their lives.

So let's get to work.

In this chapter, I will be discussing...

- Where and why pets develop arthritis
- What pets with arthritis SHOULD do... and what they shouldn't.
- Which supplements work, and which old favorites do not.
- Prescription pain relief
- Other ways to help the arthritic pet

### SIGNS THAT YOUR PET IS IN PAIN:

- **Difficulty getting up**
- **Hesitation laying down**
- **Reluctance to go up/down stairs**
- **Limping -- IF YOUR DOG LIMPS, IT IS BECAUSE THEY HURT.**

### WHERE DO PETS DEVELOP PAIN?

-If you have a **long wheelbase dog** -- attention Bassetts, Dachshunds, and Corgies, for example -- sooner or later they will become painful in the mid spine, about the area of the last rib. This is also the area they tend to herniate most discs, creating hindlimb weakness or paralysis.

-If you have a **young large breed dog that "bunny hops"** when running or has difficulty getting up, it is likely their hips -- most commonly hip dysplasia.

-For **middle aged large dogs**, the two most common problem joints are the shock absorbers -- the elbows in front and the knees in the hind.

-If your **large breed dog suddenly starts limping on a hind leg**, over 70% of the time it is due to a stressed or torn ACL.

-Just as with humans, **knee/hip pain usually results in secondary back pain.**

### WHY LOCATION OF PAIN MATTERS

-It DOESN'T, if all you are going to do is to give drugs.

-But if you are really going to take a run at helping your pet, then location matters because...

- a) It will dictate what your pet can and should not do (eg stairs)
- b) It will dictate what non-drug ways you can help solve the pain
  - supplements
  - laser
  - acupuncture
  - physical therapy

### THE ONLY WAYS TO KNOW FOR SURE WHERE YOUR PET HURTS ARE...

- a) an exam by a vet skilled in orthopedics... and not many are
- b) x-rays or other imaging

### IF YOUR PET IS WOBBLY...

- This is NOT a joint problem. 90% of the time this is due to spinal compression somewhere between the neck and the lower back. The other 10% of the time it is because they are really sick, and just weak as a result.
- If your pet is wobbly only on its hind end, the spinal compression can be anywhere between the neck and the lower spine.
- If your pet is wobbly on all four legs, it is due to spinal compression in the neck.
- This spinal inflammation is USUALLY due to something pushing on the spine in its little closed tunnel -- a herniated disc, misaligned vertebrae (Wobbler) or cartilage (FCE). Every once in a while tumor, every once in a while Degenerative Myelopathy (DM).
- DM can be diagnosed with a blood test, but the other causes of spinal compression can only be diagnosed by MRI or CT.
- Regular x-rays will show arthritis and areas of disc collapse, but cannot look into the spinal canal itself.

### HUMAN PAIN MEDICATIONS FOR DOGS

- **CAN YOU USE ASPIRIN IN DOGS?** *Yes... for short periods... if you are lucky.* I can tell you that I have created some dandy stomach ulcers by okaying aspirin use in dogs back in the day, so I personally wouldn't do it... but if you are on a camping trip or in a pinch you can give it a try. Traditional dosing is 5

mg per lb body weight twice daily **WITH FOOD**, so that an 81 mg baby aspirin would work for a 20 lb dog.

- **IBUPROFEN SHOULD NOT BE USED IN EITHER DOGS OR CATS**
- **ACETAMINOPHEN CAN BE USED IN DOGS BUT NOT CATS.** The correct dose of acetaminophen for dogs is 5 mg per lb body weight given 2x daily with food.
- ANTIHISTAMINES (Benadryl, Zyrtec) HAVE NO PAIN BENEFITS

**IF YOUR DOG LIMPS ON A DAILY BASIS, THEY NEED DRUGS.** I'm going to get up on my soap box and preach for one moment. Not crystals or supplements. Drugs.

### **NSAID PAIN RELIEF: The MOST EFFECTIVE drugs are the classical NSAIDs**

- These include Rimadyl/carprofen, Deramaxx, and meloxicam
- Some dogs may respond better to one drug than another, just like you might like Advil and I might like Tylenol.
- If your dog has bone cancer, choose Deramaxx first because it helps to fight tumor growth.
- The risks of these drugs are overblown, and sadly leave many dogs painful because well-intentioned folks don't want to use them. I give my dogs carprofen on a daily basis, so you heard it here. However, if your dog has liver/kidney problems or a sensitive GI tract, I'd start with...
  - a) **Galliprant**, the "safer" NSAID. Unfortunately, in my experience it is not nearly as potent a painkiller as the big 3 above.
  - b) **Tramadol**... has been proven ineffective for most dogs so beware.
  - c) **Gabapentin** is commonly used for spinal pain, but can sedate the snot out of some dogs. It is not very effective by itself, and is best used in combination with another painkiller.

### **THE NEW KID ON THE BLOCK: LIBRELA INJECTIONS**

- Given once monthly by your vet
- **Librela appears to be very safe and about the same potency as low dose NSAIDs.** Not a cure-all, but a help. To me, the best use for Librela may be to use it IN COMBINATION with an NSAID to allow you to use lower doses of both. Most folks, including me, believe multi-modal pain relief is better than just relying upon one drug for serious pain. However, if your pet is only mildly painful or if they are a pain to give pills to... then Librela could be a GREAT choice for you.

## ADEQUAN INJECTIONS FOR YOUR PET

Adequan injections are thought to “lubricate up” an arthritic joint, and seem to help 40-50% of painful pets in my experience. Like the hyaluronic acid that I inject into my own knee, Adequan would be most effective if injected DIRECTLY into a painful joint. However, there are studies that show that intramuscular, or even subcutaneous injections by you at home, offer some benefit to pets.

## JOINT SUPPLEMENTS THAT ACTUALLY WORK FOR YOUR PET

**Let’s start with one that, sadly, does NOT.**

Glucosamine/chondroitin joint supplements have been proven INEFFECTIVE in both humans and pets, and in the words of one study author, “.... Can no longer be recommended for joint health in any species studied...”. Pretty strong stuff.

**Let’s also start with WHERE they work, and WHERE they DON’T.**

The truly effective joint supplements (Undenatured Type II Collagen, MSM, Green Lipped Mussel, and hyaluronic acid) help painful joints but NOT painful spines, because the anatomy is different. Fish oil supplementation appears to be effective for both spines and joints. For one thing, it does not discount the moderate benefit of oral hyaluronic acid, the same product that I have been injecting into my own painful knee for the last year or so.

**Will joint supplements cure arthritis?** To be clear, joint supplements do not “cure” arthritis in either humans or pets. Rather, our goal with proven supplements is to reduce both current joint pain and future progression of arthritis.

## HERE'S WHAT CURRENT SCIENCE TELLS US ABOUT SUPPLEMENTS FOR ARTHRITIC JOINTS, IN PETS AND IN HUMANS.

For years we knew that the pain of rheumatoid arthritis was only initiated by the joint, but was in fact DUE primarily to the immune system and its mediators. Now we know that the same thing is true for ALL causes of arthritis. Simply put, *our own immune system is the biggest source of pain when dealing with arthritis.*

Thus, the most effective way to treat arthritic pain... naturally... is by minimizing the effects of our immune system on our damaged joints. How?

**1) Undenatured Type 2 Collagen products, like our [TRANSCEND](#).** UC-II actually suppresses the immune stimulus by desensitizing the body to damaged joint cartilage. You can find UC-II a lot of places, but I'd appreciate it if you'd buy it from us :)

**2) Advanced curcumin products, like our [LONGEVITY PLUS](#).** Listen up -- not all curcumin products are created equal. All "turmeric" and most generic curcumin products are so poorly absorbed that you honestly can't find any active curcumin in the

blood after eating a pill. ***The patented CurcuWin in our Longevity Plus is absorbed over 100x better than standard curcumin.*** [Here's the study.](#) If you want more info on that reach out to me. Once absorbed in sufficient quantities, however, curcumin has been shown to be as potent a pain reliever as NSAIDs in humans. [Here is that study.](#)

**3) Boswellia extracts** -- also contained in Longevity Plus. [Here's a good study.](#)

OK, enough about the products that we carry. Here are the other supplements that are actually PROVEN effective in helping reduce your pet's joint inflammation:

- **FISH OIL** – this is the active ingredient in many “joint diets”, but you can simply buy it for yourself and add it to your pet's current diet as well. [Here is a dosage chart](#) from CSU for fish oil in arthritic dogs.
- **MSM**
- **Green Lipped Mussel**
- **Oral Hyaluronic Acid**

## THE LIFESTYLE OF A PAINFUL PET

There's an old financial proverb that says... “when you're in a hole, stop digging”. The same thing applies to our arthritic pets. As I mentioned above, the two most common areas for pets to develop painful arthritis are...

- The shock absorbing joints – wrist, elbow, knees
- And the spine.

Thus, our goal is to minimize concussive forces (ie jumps), twisting play, and stressing the back. How do we do that?

- No jumping exercise – running or trotting on level ground is just fine, but jumps are not.
- Use a ramp, or lift, your dog into and out of the car
- Avoid stairs
- Avoid twisting play like thrown Kongs in favor of throwing tennis balls in a straight line.
- Avoid slippery floors like hardwood, or put rubber-backed throw rugs down to prevent slipping. Carpet and grass are ideal footing for painful pets.

Every time an arthritic pet jumps, goes up/down stairs, or slips and falls they are hurting themselves and worsening their arthritis.



## DOG EARS 101

Let's chat about dog ears. Everything you need to know about their routine and medical care, rolled up into just a few pages. And away we go...

### WHAT ARE THE SYMPTOMS OF EAR INFECTIONS IN DOGS?

- Continually shaking the head
- Scratching at the ear(s)
- Ear redness and discharge, sometimes odor.
- A head tilt – the affected ear is the “down” one.

### WHY ARE EARS SUCH A PROBLEM FOR SOME DOGS?

- They are **VERY sensitive**, as anyone who has had an ear infection can attest.
- ***The shape of the ear canals allows problems to get in, but prevents their getting out.*** More on that below.
- For many dogs, irritated ears are one of the first signs of systemic allergies or infections.
- Any dog with **“pendant ears”** – ie, ears that hang down like a hound instead of erect like a Shepherd—will be more prone to ear infections. This means you, retrievers of the world!! Why? Because those hanging ear flaps prevent drying air circulation into and out of the ear... so the ear canal stays nice and moist.

**LET'S TALK ABOUT THE SHAPE OF THE EAR CANAL.** Whoever designed dog ears had an off day. Here's the problem: The canal is the shape of an "L", with the ear opening at the top of the L and the eardrum at the end of the bottom leg. This means that gunk and hair (and foxtails, where I practice) can easily fall into the TOP of the ear (ie, the "vertical canal"), then come to rest down in the "horizontal canal", where it would take a minor miracle for them to get out. That's the BIGGEST problem for ears.

**The OTHER big problem for ears is.... ALLERGIES.** If you have inflammation in ONE dog ear, it's just bad luck. IF BOTH EARS ARE INFLAMED, OVER 80% OF THE TIME IT IS DUE TO ALLERGIES... usually to something your pet has eaten. More specifically, a protein (think meat) or preservative in the diet.

The last thing you should understand is that the ear canal itself is narrow -- about the diameter of a pencil in the average 40 lb dog -- and lined with glands. This means that **MOISTURE tends to accumulate in the horizontal ear canal...** and bacteria and fungi love nothing more than dark, moist homes.

Solve these 3 issues, and you'll solve ear issues in 99% of the dogs in the world.

## **HOW DO WE PREVENT EAR INFECTION IN FOR OUR DOGS?** Let's dive in.

**-The hardest one first: We need to minimize the hair in and around the opening to the vertical ear canal.** This will allow more airflow into the ear, and also minimize hair (or stickers caught in the hair) ending up in the ear.

- You can pull the hair, but it hurts...
- Can we use an electronic hair trimmer, like those designed for humans? Only if you use a piece of gauze or cotton to block the ear canal, otherwise the hair you trim will end up down there and cause the very problem we are trying to prevent.

**-Routine ear flushes are the best way to head off problems.** You can spend \$15-25 at your vet's, or for about 5 bucks you can make up your own. A 50/50 mix of white vinegar and 70% rubbing alcohol will work great for almost all dogs. The vinegar kills bacteria and fungi, and the alcohol dries the ear membranes out. Fill one of your dog's ears up with this mix, rub the base of the ear, and let them shake. Then do the other side. Here are a few hot tips:

- a) do this outside :)
- b) warm the ear solution to body temp -- not too hot, not too cold. Your dog will LOVE you for this.
- c) if your dog has an open sore down in the ear, this will STING so talk to your vet about an alternative.

**-If you live in the west, understand that dried weed stickers (the foxtails that I mentioned earlier) are a seasonal risk.** Choose where to walk very carefully!!

## **HOW TO TREAT YOUR DOG'S EAR INFECTIONS**

### **At Home:**

- Understand that, if untreated, ear infections can jeopardize your pet's hearing and vestibular control (ie, balance), and may even spread to the brain.
- Recognize this is very painful. Don't get bit trying to help your dog.
- You can flush the irritated ear with saline solution, like I use for my contacts.
- Usually, you're going to have to visit with your vet.
- If it's BOTH ears, be aware that this is usually not so much an ear problem as a dietary allergy, usually to a meat or grain within your diet or treats. Until you solve the underlying allergies, you are screwed.
- The good news is that even a severe ear infection is rarely spread to another pet or human.

## **At the Vet:**

### **What SHOULD my vet do to solve my dog's ear infection?**

**1) Recognize that it's not much easier for a vet to deal with a very painful ear than it is for you.** Many pets need to be sedated to allow examination and treatment of a painful ear.

**2) If you live in an area with stickers, ALWAYS mention this to your vet.**

**3) If it's a mild or first- time problem, ask them for a combination ointment instead of spending money on testing.** These days, most ear meds contain a drug to kill bacteria, another drug to kill fungi, and a third drug to reduce inflammation. This eliminates having to do a lot of testing for most dogs. Skip straight to the treatment.

**4) If it's a bad or recurrent problem...**

-Your pet should be sedated to solve it.

-Your vet may recommend an ear swab and culture to determine what bugs are living in your dog's ears, and thus how best to treat them.

-Your vet should prescribe oral antibiotics and pain relievers.

A couple other things:

Try like heck to avoid any antibiotic ointment containing **GENTAMYCIN**. Although effective for certain bacteria, it can every once in a while create permanent hearing loss. There are better and safer drugs these days.

Because treating a dog's painful ears is no fun for anyone, there are now **REPOSITORY** meds that can be put into your pet's irritated ear. These "Otic packs" eliminate the need for daily treatment, and will gradually be absorbed over a 10-14 day period. Because they completely fill the ear canal, they may reduce your dog's hearing until they absorb.

## DENTAL CARE FOR YOUR PET

Here's where you'll learn how to add months -- or even years-- to your cat or small dog's life. How? **DENTAL CARE.**

But here's the deal. **IT HAS TO BE THE CORRECT DENTAL CARE.** More on that below.

### HOW DOES CORRECT DENTAL CARE HELP MY PET LIVE LONGER?

- FACT: Severe **periodontal disease reduces lifespan by 7%**
- FACT: Periodontal disease can create/worsen heart disease
- FACT: Periodontal disease creates DAILY pain and inflammation
- FACT: Periodontal disease is linked to cancer and senility.

And yes, this is primarily an issue for dogs under 25 lbs and cats. Larger dogs have their own fish to fry, but are less affected by dental disease except for teeth cracked or broken by chewing on rocks/sticks, etc. So if you have a 60 lb Lab, don't let your vet guilt you into cleaning their teeth because of a little tartar buildup.

### WHAT ARE THE SYMPTOMS OF DENTAL DISEASE IN PETS?

Once the disease gets bad, you will find...

- Bad breath
- Irritated, swollen gums.  
... but our goal is to solve it **BEFORE** it gets this bad.
- Every cat and dog under 25 lbs should have an anesthetic dental cleaning by the time they turn 5 years old.

### IS TARTAR A SIGN MY PET HAS DENTAL DISEASE?

Tartar, the hard greyish/brown shell attached to your pet's teeth near the gumline, looks bad. But that's just it. It's not a health issue, just cosmetic. The real dental disease lives under your pet's gums.

## What is CORRECT DENTAL CARE??

Here's what it ain't. **Brushing your pet's teeth actually does very little to prevent dental disease.** Vets hate to say this, but it's true. So stop guilting yourself about brushing your pet's teeth -- you just can't get to the problem areas.

Here's another thing it is NOT: **Anesthetic-free dentals do NOTHING** for periodontal disease, and cause only stress and pain for your pet. Here's why:

- the tartar that can be removed by an anesthetic-free dental doesn't cause ANY problem for a pet. It's just a blemish.
- All the disease is *UNDER THE GUMLINE*, where it cannot be reached without discomfort
- Without anesthesia, you cannot take x-rays of your pet's teeth.
- Fear and stress: nobody likes going to the dentist, with their sharp metal tools on sensitive gums. You and I understand why; your pet does not.

### **HERE'S WHAT CORRECT DENTAL CARE IS:**

- **Annual, or sometimes even more frequently**
  - **RADIOGRAPHS OF EVERY TOOTH**
  - **The treatment or extraction of any diseased tooth**
  - **Post-dental antibiotics, and pain relief if teeth were extracted or gum surgery performed.**
  - **Skilled general anesthesia by the veterinarian you trust.** This anesthesia should include...
    - Written anesthesia plans and charts
    - Continuous monitoring with ECG and pulse oximetry
    - IV fluid support during and after the procedure.
    - Patient warming
    - Postoperative care
- ASK YOUR VET ABOUT THESE THINGS. IN DETAIL.**

Some vets say they do dentals without tooth x-rays. The other word for that is **MALPRACTICE**, sad to say.

If your vet cannot take dental x-rays of every tooth... you need to find a different vet to trust with your pet's dental work.

## HOME DENTAL CARE

I mentioned up above that brushing is not very effective in keeping your pet's mouth healthy. It won't hurt, either, but it doesn't do wonders for the relationship that you share with your pet.

Likewise, most "natural" dental care products have no proof that they work.

**Want to use products PROVEN effective in reducing periodontal disease in your pet? Here's a list for you,** courtesy of the Veterinary Oral Health Council. These products are backed by study and by science.

- [For Cats](#)
- [For Dogs](#)

One interesting side note is that our old friend [rapamycin helps to both prevent and treat periodontal disease](#) -- another way it helps us live longer.

## **CANCER AND OUR PETS**

In this chapter, we're going to talk about our worst fear—cancer.

Why is this important? Because cancer will affect one out of three dogs in their lifetime. With odds like this, there's an awful lot of research being done on how to make cancer a disease that dogs die WITH, and not FROM.

And I'm jumping into the middle of this fight, because I lost my best friend MacGregor to cancer back in the day and I want to do everything I can to help your pet walk a different path. From here on out, I'm going to devote a lot of work to improving odds for pets with cancer. Starting now.

### **HERE ARE LINKS TO [HPLL](#) WORKSHEETS ON THE MOST COMMON FORMS OF CANCER IN OUR PETS.**

- [LYMPHOMA](#)
- [HEMANGIOSARCOMA](#)
- [MAST CELL TUMORS](#)
- [OSTEOSARCOMA](#)
- [SARCOMA](#)

### **HERE ARE LINKS TO THE SPECIALISTS YOU MIGHT NEED IN YOUR PET'S JOURNEY:**

- [ONCOLOGISTS](#)
- [INTERNAL MEDICINE SPECIALISTS](#)
- [RADIOLOGIST AND RADIATION ONCOLOGISTS](#)

**So here we go -- a master's class for you on cancer in our pets.**

**1) EARLY DETECTION COUNTS. THIS IS THE SINGLE BIGGEST ADVANTAGE THAT YOU CAN GIVE YOUR PET.**

The smaller the number of cancer cells your pet has at diagnosis, the more treatment options exist and the longer they will live. How do you do this?

**-Monthly massage of your pets to find small skin bumps.** If you do find one, clip the hair over it or leave a little dab of fingernail polish on the site so that you and your vet can find it again. Take a picture of it next to a dime so that you can see if it grows in a month's time, and if it does it is time for a visit with your local vet.

**-Yearly dentals under anesthesia**, as this is a chance to not only solve dental disease but also to examine the mouth and throat.

**-Yearly blood and urine tests to assess organ function.** Enough said.

**-EARLY CANCER DETECTION BLOOD TESTS.** There is now a [blood test](#) that can detect cancer cells in your pet's blood LONG BEFORE the cancer creates a problem. If you have a large breed dog, I'd think hard about beginning these tests by the age of 7.

**2) IF YOU FIND A SUSPICIOUS LUMP, YOU NEED TO HAVE A BIOPSY DONE.**

*DO NOT WAIT ON THIS!!* Many times you can get a great idea on what's going on with a simple Fine Needle Aspirate, which doesn't cause any more discomfort than getting a vaccine. If a larger sample and anesthesia is needed, consider asking your vet to get blood samples and x-rays while your pet is snoozing so that they don't face any additional restraint or stress. All FNAs and biopsies should be reviewed by a pathologist, and your vet can take care of this for you.

If you're dealing with such a malignancy, PLEASE reach out to me prior to your surgery so that we can walk through some important details.



**3) MOST VETS LIMIT THEIR ROLE IN CANCER TREATMENT TO THE SURGICAL REMOVAL OF THE MASS.** This is not enough. We need to assess your pet as a whole, including cancer treatment, other health issues, nutrition, supplements, and lifestyle risks. Cancer therapy should be complete and holistic. Simply put... we don't want to miss anything that could help your pet.

**4) SPECIALIST ACCESS:** At HPLL, we now have *direct access* to a network of internal medicine specialists, including cancer specialists, with under a two day turnaround. No more waiting for weeks to get the answers you need. No cancer worries? Great. I can get you lined out with eye specialists, dermatologists, neurologists... and the list goes on. Hope you don't need them, but just in case...

**5) TRADITIONAL CHEMOTHERAPY—is it right for you and your pet?**

PROS:

- a) Many times offers the longest survival
- b) Best studied form of cancer prevention

CONS:

- a) Side effects
- b) Expense

## 6) THE NEW TREATMENTS ON THE BLOCK

-[RAPAMYCIN](#) has broad anti-cancer properties

-**CANCER VACCINES** -- using your pet's own immune system to fight their cancer. This requires special handling of the biopsy sample, above.

-**METRONOMIC CHEMOTHERAPY** -- micro doses of chemo given orally by YOU, at HOME.

-**MOLECULAR ANALYSIS** of your pet's tumor in the hopes of finding an oral drug on the human side that, again, can be given by you at home. Check out [FidoCure](#).

-**ADVANCED RADIATION TREATMENTS** – check out [PetCure](#).

## 7) NATURAL SUPPLEMENTS FIGHT MANY FORMS OF CANCER

-[LONGEVITY PLUS](#)

-[GREEN TEA](#) (decaf, for pets)

-Vitamins C and D

## 8) DIETARY THERAPY FOR CANCER

-[KETO DIETS](#) can reduce cancer growth by limiting carbohydrates,

which are the preferred fuel source for cancer cells.

-**CRUCIFEROUS VEGGIES** – broccoli, kale, etc, are potent cancer fighters.

# THE HEALTHIEST FOOD FOR YOUR DOG

At [NaturalPet.Health](#), our goal is simple -- to help your pet live longer.

Sure, we sell rapamycin and some really great natural supplements. But what your pet eats is one of the single most important factors in both their health and their lifespan. Everybody has an opinion... but few folks have facts. Now you will, so you'll be very popular at parties :)

I get questions all the time about the best diet for dogs. The only problem with that is that IT JUST DOESN'T EXIST. There is no one best diet for all dogs, just as with humans.

But I can give you some guidelines, based on both science and what I have seen in over 30 years in vet clinics. Here we go.

## WHAT'S THE ONLY PROVEN WAY TO EXTEND DOGS' LIVES THROUGH DIET?

Don't tell your dog this. The only **PROVEN** way to help your dog live longer through diet is... **TO FEED THEM LESS**. Here's the [science](#). Taking it one step further, the [Dog Aging Project has shown](#) that dogs fed ONCE daily are healthier than dogs fed more frequently. Sorry, dogs.

## FACT OR FICTION: WE SHOULD CHANGE OUR PETS' DIETS BECAUSE THEY GET BORED EATING THE SAME THING.

**FALSE.** Dietary changes create WAY more GI problems than they solve. Here's when you should change your dog's diet:

- when their energy needs change
- when they run into a health issue
- when their diet is not well tolerated -- belching, diarrhea, grass-eating, and the dreaded dog farts.

Dogs DON'T get bored. What they do is get SMART, and they know they can get their parents to give them treats or novel foods. Just ask my dogs.

## **FACT OR FICTION: GRAIN FREE DIETS ARE BEST FOR YOUR PET.**

Definite MAYBE here. I fell hard for this back in the day, because I have seen a bunch of pets that were proven allergic to corn and wheat. That concern has been publicized by the great GLUTEN DEBATE that's gone on in human medicine for the last decade. *Here's where I got it wrong -- solving an allergy for one group of pets doesn't mean that grain-free diets are better for all pets.* We now know that grain-free diets are low in an amino acid called [TAURINE](#), which is essential for heart health. **Pets on grain free diets have a higher incidence of heart failure.** Here's the [science](#). Work-around? Grain free diets plus [TAURINE](#) supplementation.

## **SPEAKING OF FICTION, HERE'S SOME FOR YOU:**

1) **The PUPPY diets are a bunch of nonsense** designed for only one thing - to open your wallet. As an example, the healthiest large breed puppy diet is ACTUALLY one with lower protein, because the SLOWER a puppy grows the healthier their bones and joints will be. Proven.

2) Likewise, **HIGH PROTEIN diets pose a risk** to most pets due to increased liver and kidney workload. Use them only if your dog is burning a bunch of calories with daily exercise.

3) **BREED-SPECIFIC DIETS?** No basis whatsoever.

## **MY PET HAS ALLERGIES. WHAT'S THE BEST WAY TO FEED THEM?**

Oh, boy -- lots to talk about here.

- **THE BEST WAY TO TREAT AN ALLERGY IS TO AVOID THE ALLERGEN.** In order to do that, you have to KNOW what it is. You and your vet can use dietary trials ( a pain in the butt) or the newer blood allergy tests from folks like [VARL](#)
- **FEED YOUR PET ONLY ONE TYPE OF MEAT PROTEIN FOR AS LONG AS YOU CAN.** If your pet develops an allergy to that meat, then switch to another. If you give your dog a mix of meats, you are effectively sensitizing them to those meats... leaving you with fewer safe choices down the road. To learn more, Google "dog allergies sacrificial protein".
- **THE MOST COMMON ALLERGENS FOR DOGS ARE GRAINS, BEEF, AND PORK.** Poultry is next, so the best dietary guess for allergic pets is either fish, vegetarian, or the prescription diets based upon... unusual... meats like alligator or kangaroo.

- **IF I HAD TO PICK ONE DIET FOR ALLERGIC PETS...** I would choose a home cooked veggie diet. If not practical, plan B would be prescription alligator- or kangaroo-based diets. (Yes, really.)

### **MEAT-BASED DIETS ARE BEST FOR MY PET. OR ARE THEY?**

They are... **IF** they are balanced and contain only fresh, whole foods. The science shows that over 95% of homecooked diets do not contain the balanced nutrients necessary for good health, and in some cases home-cooked diets will worsen or create diseases. The workaround -- a nutritional consult with companies like [Balancelt](#)

The **ONLY** problem with homecooked meals is that they take time, and many of us (like me) don't have that time.

### Saved the best for last... **WHAT'S BEST -- KIBBLES OR FRESH OR RAW?**

Spoiler alert -- there is no **ONE** best diet for all pets and their families. One thing we can all agree upon: "better" ingredients are healthier and cost more. The problem is defining "better". Here are some things to think about:

#### **KIBBLES**

-PROS: Really, the only pros are cost and convenience. But... those are big ones.

-CONS:

- a) By definition, kibbles are high in carbohydrates because you need carbs to "glom" the kibble together.
- b) Ingredient quality varies.
- c) Kibbles, by definition, have preservatives in them. Some are natural, some are not. You need to do the research.

#### **FRESH**

-PROS:

- a) in **THEORY**, a better grade of ingredients. In practice, this is not always true. There is currently **NO** science proving the superiority of fresh diets when it comes to pet health. However, there are ample studies in human nutrition that prove this fact.
- b) Absence of preservatives and food additives. Undoubtedly good.
- c) Generally a low carb diet

-CONS:

- a) Cost -- many over \$20/day for large dogs;
- b) freezer space

## RAW

### -PROS:

- a) Just as with fresh diets, in theory a better grade of ingredients. However, that is not always the case and you need to choose your brand wisely.:

### -CONS

- a) The biggest one is potential bacterial contamination of raw foods. This is typically due to either E.coli or Salmonella, and I have seen it turn fatal. The solution: HPP, or high pressure pasteurization, of your pet's raw food. Check out [Instinct](#) raw diets – I have no vested interest in their company, but they seem to be trying pretty hard for our pets.

# THE LARGE DOG MANIFESTO

## A Longevity Checklist for Loved Dogs over 50 lbs

- OPTIMAL BODY WEIGHT
- THE CORRECT DIET, HEALTHY TREATS
- LIFESTYLE
  - Lots of Level Exercise
  - Avoid stairs and jumping on/off furniture
- VETERINARY CARE
  - Exams once a year until age 7, then twice a year.
  - Vaccines ONLY as dictated by your pet's risks
  - Heartworm prevention as dictated by mosquito exposure
  - Flea/tick prevention ONLY as dictated by risk.
- DENTAL CARE – less important than for smaller pets
  - Fractured or cracked teeth should be evaluated with x-ray
  - ANESTHETIC dentals every 2-3 years beginning about 6
  - Non-anesthetic dentals do no good, and only stress pets.
  - EVERY tooth should be x-rayed at EVERY dental.
- LABORATORY DIAGNOSTICS
  - Blood and urine tests, including thyroid, every year after 5
  - Chest x-rays once a year after age 7
  - Blood pressure checks once a year after age 7
  - Early Cancer Screening beginning at age 7
- LONGEVITY DRUGS
  - Rapamycin
  - Acarbose
- SUPPLEMENTS
  - Consider Longevity Plus
  - Consider Transcend for lameness
  - Consider Green Tea (decaf) for cancer/inflammation prevention.





# THE SMALL DOG MANIFESTO

## A Longevity Checklist for Loved Dogs Less than 25 lbs

- OPTIMAL BODY WEIGHT
- THE CORRECT DIET, HEALTHY TREATS
- LIFESTYLE
  - Lots of Level Exercise
  - Avoid stairs and jumping on/off furniture
- VETERINARY CARE
  - Exams once a year until age 10, then twice a year.
  - Vaccines ONLY as dictated by your pet's risks
  - Heartworm prevention as dictated by mosquito exposure
  - Flea/tick prevention as dictated by risk.
- DENTAL CARE – a VITAL component of your pet's longevity
  - Annual ANESTHETIC dentals beginning no later than 5 yrs
  - Non-anesthetic dentals do no good, and only stress pets.
  - EVERY tooth should be x-rayed at EVERY dental.
- LABORATORY DIAGNOSTICS
  - Blood and urine tests every year after age 5
  - Chest x-rays once a year after age 10
  - Blood pressure checks once a year after age 10
- LONGEVITY DRUGS
  - Rapamycin
  - Acarbose
- SUPPLEMENTS
  - Consider Longevity Plus
  - Consider Transcend for lameness
  - Consider Berberine for heart problems

# PET LONGEVITY DRUGS



## RAPAMYCIN FOR OUR PETS

This chapter is all about [RAPAMYCIN](#), the drug that has taken the human/pet longevity world by storm over the last five years.

Before we get started, you should know that I sell [RAPAMYCIN](#), so I have a horse in this race. However, you should also understand that I take rapamycin myself, prescribe it to my patients, and give it to my own pets... so my interest in rapamycin and its proven benefits is much more than just economic.

And I'm not the only one. The [DOG AGING PROJECT](#) has enrolled hundreds of pets in its rapamycin study, and could enroll yours too. This is the coolest longevity study ever done for our pets... but the answers will likely not be available for 7-10 years, and I want my patients to have the benefit **NOW**.

I want to respect your time, so will keep this as brief as I can. *Here are the proven benefits of rapamycin:*

- 1) Rapamycin directly fights many forms of cancer.*
- 2) Rapamycin reduces pain and inflammation*
- 3) Rapamycin improves heart function in pets with cardiac disease*
- 4) Rapamycin improves immune and stem cell function*

Taken together, these are why ***RAPAMYCIN EXTENDS HEALTH SPAN IN ALL SPECIES STUDIED TO DATE BY 12-18%. That's over a year for our pets.***

And **GREAT NEWS** for our cat pals: The [TRIVIUM STUDY](#) just proved that rapamycin can stop the progression of fatal Hypertrophic Cardiomyopathy in its tracks. No other drug has been able to do that... ever. We are now stocking [RAPAMYCIN FOR CATS](#) in a convenient oral liquid suspension.

What DON'T we know yet about rapamycin?

- 1) Is more rapamycin better, or is there an optimal dose?
- 2) How long should rapamycin treatment last?
- 3) Are there long term side effects? It appears not, but it simply hasn't been studied long enough.

Because of the proven benefits of rapamycin and longevity, there are ongoing studies all over the place in both human and veterinary medical schools. We'll know a bunch more in a decade, but here's the deal—our pets don't have a decade.

You should understand that rapamycin is a prescription drug, and so we can sell it to you only with...

- A prescription from your local veterinarian, or
- A [CONCIERGE CONSULT](#) with me.

Our current rapamycin dosage protocols are...

- FOR DOGS (based on the [Kaeberlein study](#)) 0.1 mg/kg given 3x weekly with food.
- FOR CATS (based upon the [Trivium study](#)) 0.3 mg/kg given once weekly with food.

The bottom line? ***At this point, [RAPAMYCIN](#) appears to be the single best way to increase the health span of our pets. So we're all in, and we can help your pet. Let's get started now.***

## RAPAMYCIN FOR CATS

In this chapter we're branching out and talking about a BRAND NEW development in longevity -  
- **RAPAMYCIN FOR CATS.**

*Just as with dogs, there is increasing evidence that [RAPAMYCIN](#) can help our cats live a longer and healthier life. How?*

*The big news is the [Trivium study](#), which showed that rapamycin can **STOP** the progression of a deadly cardiac disease called [Hypertrophic Cardiomyopathy](#), or **HCM**. This is a **REALLY BIG DEAL**, because we have never had a drug that would help the inevitable progression of **HCM**. One thing that rapamycin DOES NOT seem to do, and that is to REVERSE the current state of HCM... but stopping its progression is a big first step.*

*Rapamycin has also been shown to fight two of the most common forms of cancer in cats, [mammary cancer](#) and [squamous cell carcinoma](#).*

*Rapamycin has also been proven to benefit humans with Chronic Kidney Disease, and there are studies going on with our cat pals with CKD and rapamycin at Ohio State, Florida, and Texas veterinary schools.*

Thanks to the Trivium study, we now have the answers on safe and effective dosing in cats -  
- 0.3 mg/kg given orally once weekly, which translates into about 1.2 mg for the average cat.

[TRIVIUM](#) is in the process of developing a delayed-release 1.0 mg tablet for cats, but it is not scheduled to hit the US market until early 2026.

Why "Delayed Release"? Because rapamycin is degraded to a variable extent in HUMAN studies by the acid present in our stomach. We do not know if the same holds true for cats, but Trivium assumes that it does and so they are formulating their tablet to resist stomach acidity, allowing the pill to pass through the stomach and into the intestine before dissolving.

Based upon scientific studies, another way to get rapamycin past the stomach acidity is using an oil-based liquid formulation. With that knowledge, we have worked with a national pharmacy to produce an oil-based liquid suspension of [RAPAMYCIN FOR CATS](#), and it is available RIGHT NOW.

Just as with [RAPAMYCIN FOR DOGS](#), the cat rapamycin is **STRICTLY** a prescription product so we will need either your local vet's prescription or a Concierge Consult with you before shipping rapamycin your cat's way.



## ACARBOSE

If you've been around [HPLL](#) for long, you've heard about the [ITP](#) tests and their value to all of us in the longevity tribe. ***The cool news is that they have identified seven drugs to date that actually DO work to extend lifespan.*** This week we're going to follow that up with a little more of a deep dive on one of those drugs proven by the ITP to extend lifespan.

Let me introduce you to [ACARBOSE](#).

Acarbose is a drug currently used in the management of type 2 diabetes in both humans and dogs. It works to reduce the absorption of carbohydrates from the gut in two ways, by blocking an enzyme and also by altering the gut microbiome.

Why is this a big deal? Because, ***basically, the higher your blood sugar the shorter your life.*** This applies both to humans and pets. Not just because of diabetes, but because high blood sugar sets the table for...

- increased inflammation within our bodies
- organ failure
- reduced immune protection
- and impaired cognitive function. Which I've already been accused of, but that's a different story.

***And here's what is even more cool. When you combine [ACARBOSE](#) with our old pal [RAPAMYCIN](#), science shows a further 13% benefit to longevity beyond the effects of rapamycin alone.***

I can speak pretty directly on [ACARBOSE](#), as I have been taking it -- along with metformin -- twice daily for about a year. I made my blood sugar a little priority because I have a genetic history of diabetes in my family, and in fairness pastries and breads are a little weakness of mine. The combination of the acarbose and metformin dropped my blood sugar level by about 10 points.

(As an aside, I've found that I am able to reliably pretty much eliminate blood sugar spikes after a meal if I go for a half hour walk right after eating. Another strategy to consider...)

Now a quick word of caution. Start slow on the acarbose, as those unabsorbed carbohydrates have to go someplace... frequently as gas. You've been warned.

Current ACARBOSE DOSING RECOMMENDATIONS FOR DOGS:

0.5 MG PER LB BODY WEIGHT ONCE TO TWICE DAILY, ***WITH MEALS.***

The science is pretty convincing. ***Take acarbose, live longer.***





# PET LONGEVITY SUPPLEMENTS



## CURCUMIN FOR OUR DOGS

This chapter is going to give you a deep dive into CURCUMIN, which I believe to be the single most important supplement that we and our pets can take.

Why? Because **CURCUMIN...**

- **FIGHTS CANCER IN MULTIPLE WAYS**
- **REDUCES INFLAMMATION BY BLOCKING MEDIATORS**
- **REDUCES PAIN**
- **FIGHTS INFECTIONS**
- And, oh by the way, also helps Alzheimer's disease, diabetes, liver or kidney problems... even depression. Proven in multiple studies.

More proof, you ask? Here you go. Links to curcumin studies on [PubMed](#), [Google Scholar](#), and [GreenMedInfo](#). Pick a disease or health issue that matters to you, and add curcumin to the search. I'll bet you learn something.

One quick, but important, note –  
TURMERIC is not equivalent to CURCUMIN. Curcumin is the active ingredient within turmeric, and curcumin is only 3-4% of the turmeric plant. Thus, ***if you are using turmeric instead of an advanced curcumin....***  
***... you are doing nothing for your pet's health.***

Yes, I have a horse in this race because I formulated and sell what I think is the single best curcumin supplement on the market. We call it [LONGEVITY PLUS](#)

Here's why [LONGEVITY PLUS](#) is better than any other curcumin supplement on the market:

- Our curcumin is actually patented CurcuWin Ultra Plus, which is absorbed over 100x better than "regular" curcumin products. That means you can take one Longevity Plus capsule, or 100 of the others - your choice. [Check out the proof here.](#)
- We add in 75 mg of [Boswellia](#), known for its pain relief and anti-cancer properties
- Then we add in another 75 mg of [Ashwagandha](#), proven over centuries to reduce pain and stress, fight cancer, and support muscle tissue.

- Finally, we add a sprinkle of BioPerine, which aids in absorption and metabolism of the other active ingredients.

If for whatever reason you choose not to use [\*\*LONGEVITY PLUS\*\*](#) and instead use a standard curcumin product, you can maximize the absorption of standard curcumin products by...

- Giving them with oil, such as coconut or olive oil
- Warming the preparation

Because of the prescription strength of [\*\*LONGEVITY PLUS\*\*](#), we always recommend giving it only with meals.

OK, school's out. No more facts about curcumin or [\*\*LONGEVITY PLUS\*\*](#). But do the research on them, for your sake and for your pets. You'll be glad you did.

## NMN FOR OUR PETS

**Why should we think about giving NMN to our loved pets?** As all us mammals age, our NAD+ levels drop. This leads to lower mitochondrial function and less energy overall, both of which contribute to aging. NMN is a precursor to NAD+, and so ***by giving it to our pets we can boost their cellular energy and thus, just maybe, their health span.***

You know that I'm a science-based guy, and here are some studies on NMN that you might be interested in:

- [The Science Behind NMN, A Reliable NAD Activator and Anti-Aging Molecule](#)
- [Benefits of NMN in Humans](#)
- [NMN as an Anti-Aging Molecule](#)

[Here is a good summary of NMN and its use in dogs.](#)

Our current dosing recommendations for NMN in dogs is...

- 150 mg per day for pets under 30 lbs, with food
- 300 mg per day for pets over 30 lbs, with food

At HPLL, we offer [NMN FOR YOUR PET](#) in two different forms:

- **VEGETARIAN, GLUTEN FREE CAPSULES containing 150 mg of NMN.** I've done the research for you, and this is a great vegan, gluten free product made by a formulating pharmacy that I really trust. You might find cheaper products, but you won't find any that are better.
- **BULK 98.5% PURE NMN POWDER**, containing 36 GRAMS of NMN. This can be sprinkled directly over your pet's moistened food, and is a great way to save a little money besides. The purity of this powder has been confirmed by an independent lab, and I can show you those results.

Unfortunately, there are many misleading claims and false narratives about NMN on the web, along with a number of products that may or may not contain ANY NMN, much less NMN of the purity we carry. Do your own research... and let me know how we can help you.



## TAURINE FOR OUR PETS

**TAURINE** is an amino acid that can be produced by our bodies, both pet and human. However, as we age our taurine production drops way off. [A new study has demonstrated that this drop in available taurine is a primary driver of aging](#) in both mice and monkeys. There are similar studies under way in humans, and they have confirmed that taurine supplementation improves exercise parameters but the longevity benefits have not been studied yet.

**If taurine deficiency is a cause of aging, well, let's talk about taking it as a supplement to prevent that aging.** What are the **PROVEN** benefits of taurine supplementation?

- 10% longer life in male mice, 12% longer life in female mice
- Reduced body weight
- Increased muscle endurance and strength
- Improved immunity and stem cell function
- Reduced senescent or "zombie" cell accumulation (like [FISETIN](#))
- Increased mitochondrial energy

Here are some other studies that you might be interested in:

- [TAURINE AS AN ANTI-AGING SUPPLEMENT](#)
- [CAN TAURINE SLOW DOWN AGING?](#)
- [SEVEN BENEFITS OF TAURINE](#)

***We've known for years that a taurine deficiency -- usually due to diet -- is at the root of heart problems like cardiomyopathy*** in both dogs and cats. Taurine deficiencies are not uncommon with pet diets that haven't been balanced by a pet nutrition service like [BalanceIt](#) or others. ***If your pet is on a grain-free or homemade diet, YOU SHOULD BE SUPPLEMENTING WITH [TAURINE...](#) or else.***

Here's the best part. [TAURINE](#) is both cheap and safe. Do the research, and you'll see.