



*"Promoting Health to Prevent Disease"*

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### **General Concept for Home-made diets:**

If you are supplementing store-bought foods with fresh foods, consider the following. For the best nutrient absorption for our pets, veggies need to be broken down partially before eaten; this will increase the bioavailability of the nutrients; foods pass through their digestive system much quicker than in ours. In the wild, they consume the veggies from the stomach contents of their prey, which is already partially digested. If feeding fresh veggies from your kitchen, you should run them through a food processor or gently cook (brief steam) or freeze (for 1-4 weeks) to accomplish this partial breakdown.

For pre-made "MIX" to add to fresh meat, you may use a product like Honest Kitchen or Sojos; Honest Kitchen is broken down to a powder, so is thought to be more digestible for absorption of the nutrients. The Sojos comes in bigger pieces, but if you soak it over night (which I always recommend) then it likely will benefit your dog as well as the Honest Kitchen. Probably the very best thing to do is to rotate between the two of them (or others) to give your pet variety.

***Further Food for Thought on Home-made or Raw Diets (we are not trying to talk you out of this! -- we are just presenting information to help ensure that you and your pet stay safe, and the process goes FABULOUSLY!!):***

Various Sources of Recipes for Homemade diets include: Pitcairn; Beth Taylor; 4Paws, 5 Direction; Natural Health Bible for Cats and Dogs are just a few to name; **Balanced nutrition** (typically following a respected recipe source) is IMPERATIVE.

Please keep in mind that dry food is far from pathogen free. There are concerns with raw meat diets but we also have to acknowledge that animals have died from contaminated dry food; there was a recent multi-state outbreak of salmonella illness within humans. The source? Dry dog food... This list of problems with that food form is pretty extensive

### **Safety Precautions with Raw Food:**

According to a recent report [Purina forum proceedings], about 4% of cat owners feed a raw diet and about 8% of dog owners do so. This is HUGE growth in a trend that requires consideration regarding its safety. We want to make sure to have a discussion with you to be careful in your approach to using a raw diet.

The major risks of raw diets are:

1. Perforation of the GI tract by bones - this has been reported - To me, this is the most dangerous risk to the dog or cat.
2. Nutritional imbalance - nutritional osteodystrophy and rickets have now been reported a couple of times in animals being fed raw diets and one of the reports (an abstract) has nutritionists saying that after a couple of decades of almost never seeing it, it's on the upswing again. You can either choose to feed a complete and balanced commercial raw diet (Nature's Variety Instinct has undergone AAFCO feeding trials), or can consult a nutritionist who balances raw diets - [www.monica-segal.com](http://www.monica-segal.com). Her website has books that contain complete and balanced recipes using raw meaty bones.
3. Risk of infection with enteropathogens - in truth, this isn't a big deal for healthy dogs and cats, but if it is a very young or old animal, or one undergoing immunosuppressive treatment, that's a different story. The Canadian studies have shown that the majority of dogs being fed salmonella infected meat will shed it, but none of those dogs were reportedly sick. The major 'industrial' food supply is contaminated and that salmonella and e.coli cannot be avoided, so if they are going to buy raw meat from the grocery store, they should consider it contaminated. If there are immunosuppressed people in the household, or babies/toddlers, they are endangering their family. On the other hand, if you are feeding raw meat from your own farms or hunting, and butchering the meat themselves, it's hard to justify this warning (although you can talk about other parasites).

So knowing the risks and how to avoid them makes this a more safe undertaking; nevertheless we will not specifically be sure how your pet will do on a diet like this until you try it. As with most diet changes, it is typically best to make the shift gradually.

Here is a quote regarding raw diet use from another veterinarian: "I was taught in vet school to feed mainly dry food to avoid dental disease and all the other propaganda. Now that I feed a primarily raw diet with supplements and bones, my animals are lean, muscular, and have no dental, hematological, or other abnormalities. I see some animals in practice on only dry food with awful teeth and some on canned with great teeth - I believe it's a matter of individual immunity as it is in humans, not the food... I have treated a 19 year-old cat in renal failure belonging to a friend of mine. BUN 130+ and Creat 16. He had been prescribed k/d by his RDVM which mainly had to be force-fed due to anorexia. His loss of muscle mass was profound and his depression was about the same. We were also giving SQ fluids, phosphate binders, potassium supplements, epogen, calcitriol, etc. We made the decision to try a raw-based diet. We started alternating ground turkey and beef with supplements which he ate voraciously. Within two weeks he had gained significant weight which was all muscle. He lost his flabby look and HIS RENAL VALUES DECREASED DRAMATICALLY. He went on to live to 22 years old."

**1. Basic DOG Recipe:** This is based upon Dr Pitcairn's way of feeding, using raw meats, cooked grains and lightly steamed vegetables, plus supplements, and raw eggs a few times per week. I also use an adapted version of his "Healthy Powder". His recipe uses nutritional yeast, lecithin, bone meal, kelp or alfalfa (as a green supplement), and Vit. C. Instead of the kelp/alfalfa, you might consider a broader spectrum green supplement. Also, yeast seems to make some dogs itchy, so try with or without for a couple weeks to see if there's a difference. The lecithin and an appropriate amount of bone meal should be balanced.

I use a higher percentage of meat than he does, based on info provided by Mary Straus and Lew Olson. The food I make is usually about 60% raw meat, 20-25% cooked veg, 15-20% cooked millet or oatmeal (by weight). Some dogs need more limited ingredients based on GI or skin sensitivity. If there are allergy concerns, try to use no corn meal, alfalfa, yeast, or pork; only a few veggies too (nothing starchy). If there are no allergy concerns, variety is best!

The meat portion is typically 1/3 muscle meat + all skin or fat, 1/3 fatty ground meat, 1/6 gizzards or canned fish, and 1/6 organic liver, kidney or other organs.

Mary Straus <http://dogaware.com/> Lew Olson <http://www.b-naturals.com/>

Lew has recently written a book, Practical Canine Nutrition: A Handbook For Raw and Natural Diets, available June 2010, so I'm looking forward to seeing what she has to say. I haven't bought products from her website, but she does have several helpful articles there, and she is also started the K9Nutrition group on Yahoo groups.

Consider some preground meat with ground bone from Bravo, just to add some variety (*Bad Dog Frida* carries this) <http://www.bravorawdiet.com/bravoproducts.html>

## **2. Supplements:**

1. A probiotic is always great: example is Nutrition Now PB8. It contains traces of dairy, but does not have lactose as an ingredient:

<http://www.iherb.com/Nutrition-Now-PB8-Pro-Biotic-Acidophilus-120-Capsules/5931?at=0>

Consider a prebiotic also ("food" for the good bacteria!)

2. Green supplements I like are Aunt Jeni's "All Systems Go!", or "BioPreparation", or a Standard Process supplement (Green Food), or "Invigor" by The Honest Kitchen. Animal Essentials Organic Green Alternative is another option. Consider Wheat grass (grown at home :-).

3. Oils: Dr Pitcairn doesn't provide a lot of info about supplementing with fish oil, but Straus and Olson both recommend 1000 mg per 20 lbs body weight for healthy dogs; 1000 mg/10 lbs body weight for dogs with health issues. Pitcairn likes to add vegetable oils as well, but I haven't been convinced that the Omega 3s in vegetable oils are easily converted by dogs, so I add only about half of what he suggests, and have bumped up the animal fat portion of the recipes instead, by using higher fat ground beef and more chicken skin. I use either fish oil capsules, or sometimes Grizzly Salmon Oil (pump bottle).

4. Vit E: 200 IU/day , 5. Glucosamine, plus other joint remedies are great (Liquid Health 5000; Dog Gone Pain),

6. B-Complex

### **Basic ten-pound batch recipe :**

2 pounds chopped muscle meat (chicken thighs with skin, beef heart, pork, etc.)

2 pounds ground meat

1 pound chicken gizzards

1 can of canned salmon

8 - 10 oz diced organic beef liver  
2.5 pounds cooked veggies  
1.5 pounds cooked grains (oatmeal or millet)  
Calcium: 4 to 4.5 tsp ground egg shell

7 TBSP Healthy Powder (my version - only has lecithin and bone meal) – This home-made powder is made from: Bone meal, lecithin, nutritional or brewer's yeast, vitamin C

Once you get your own "system" worked out, it doesn't take much time - maybe 4-6 hours per month. You can buy 3 large containers that each hold ten pounds of food, so I can mix the food in these containers, then store them in the freezer.

*From our Nutrition Handout:*

### **My pet has allergies - will a food change help?**

There are two main classes of allergies - environmental allergies (atopic dermatitis) and food allergies. Both can be characterized by itchy feet, abdomen, face, and hindquarters. Many dogs have a combination of both of the above and varying degrees of symptoms. Food allergies may also be associated with loose stools or stomach upset. Allergy testing can be done for environmental allergens (pollens, grasses, dust mites, etc.) but no good test is available for food allergies. However, the current treatment and diagnostic test is a hypoallergenic food trial. Omega-3 fatty acids are often used in conjunction with other changes as well (see fatty acids section below). Regardless of the type of allergies, a whole foods diet can produce remarkable improvements and offer both you and your pet relief. Home-prepared diets with a new ('novel') protein source, a single or no grain portion (rice, quinoa, potato), and healthy vegetables has been shown to be beneficial in the treatment of food allergies. Each animal has an individual sensitivity to each protein source - you may have to try one for a period of three months before knowing if the elimination diet was successful. If signs remain, a different protein source and grain should be tried for the same time period. Some research indicates that dogs may have increased sensitivity to fish or venison, but again it depends on the dog. Traditional Chinese Food Therapy can be of great benefit in many of these cases - ask us for more information and please read the section below. The alternative to raw, homemade diets or prepackaged diets with novel protein sources is hydrolyzed protein diets marketed by some pet food manufacturers. Basically, a special process is used to break proteins down into small parts which avoid detection by the immune system. While these have been shown to be effective in some cases, potential problems include animals not being very excited with their taste and continued signs if all of the protein is not broken down. More importantly, we believe the ingredients of these diets address one body system while ignoring critical nutrition necessary to strengthen the whole animal. We will work closely with you to design a program to diagnose and treat your pet's allergies.

### **My animal has been diagnosed with irritable bowel disease - what can I do with the diet?**

Irritable bowel disease has become increasingly diagnosed in our companion animals. It basically describes an overabundance of inflammatory cells and substances in the gastrointestinal tract. We believe that diet plays a predominant role in its formation and severity, although certainly not all cases can be managed with diet alone. Acupuncture and Chinese Medicine have often proved successful when coupled with food therapy. Depending on the severity, traditional treatments (anti-inflammatories) may be necessary in the short term to ease the stress of the digestive tract. Diet selections often mirror those with food allergies (in some cases, the conditions may be related), with a novel protein diet trial being an approach that is often adopted. Please review our section on food allergies for that information. In addition to the contribution of food to your pet's signs, bacterial changes may be responsible for the development of IBD. As a result, probiotics could be considered for prevention and treatment. We also highly recommend Seacure for Pets, a hydrolyzed whitefish protein which in humans and other animals has been shown to regulate normal immune function and alleviate signs of IBD. The addition of yucca extract may also decrease inflammation.

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One specific "over-the-counter" hypoallergenic diet idea to try is "Natural Balance limited ingredient, Allergy Formula"; there are various formulations, but this one below might be great:

**Natural Balance® L.I.D. Limited Ingredient Diets® Sweet Potato & Duck (or Bison, Venison, Fish, Lamb) Formulae for Dogs** is a new Grain-Free Allergy Formula made for dogs allergic to other meat sources, for All Life Stages, from Puppies through Adulthood  
<http://www.naturalbalanceinc.com/dogformulas/allergy.html>

**Some other ideas to consider,**

1. "Evangers" makes pure canned organ meat (to add interest to another limited-ingredient kibble; this is not itself a complete diet--so it is used for supplementing a balanced diet, or to MAKE a balanced home-cooked diet from a recipe. If adding this to kibble, about 10-20% being added as this is fine. Using the "SoJos" or "Honest Kitchen" dry mix with the Evangers meat added is another way to use this food.

2. "Pure Vita" has a Duck and Oatmeal food; this is a high-quality food, but it does have various carbohydrate sources (oatmeal, barley and potato).

website= [http://www.nutrisourcedogfood.com/purevita/duck\\_and\\_oatmeal](http://www.nutrisourcedogfood.com/purevita/duck_and_oatmeal)

3. Ziwi Peak -- Venison (kibble, and canned), no grains, no eggs  
<http://www.ziwipeak.com/nzl/cuisinefamily.shtml>"

4. Acana Pacifica -- three fish as protein source, no grains, no eggs  
<http://www.championpetfoods.com/acana/show-product.php?formulation=pdf>

5. California Natural Lamb and Rice, or Chicken and Rice (canned and kibble available)

<http://www.californianaturalpet.com/products/default.asp?id=1671>

<http://www.californianaturalpet.com/products/default.asp?id=62>

6. Evo, canned: duck, or venison:

<http://www.naturapet.com/brands/evo.asp>

**\* In the "Raw" line of complete commercial diets:**

1. Limited ingredient Turkey frozen complete limited-ingredient patty "Bravo Balance"

<http://www.bravorawdiet.com/balance/index.html>

2. Primal raw diet (Duck, Pheasant, Quail, Venison single-source protein available)

<http://www.primalpetfoods.com/product/list/c/7>

3. Companion Natural Pet Food: Duck, Turkey, Beef single-ingredient formulas available

<http://www.companionnaturalpetfood.com/index.php>

Home cooked diet resources to help you formulate a hypoallergenic diet at home:

**Nutrition Services And Books For Homemade Diets:**

- [American College of Veterinary Nutrition <http://www.acvn.org/>](http://www.acvn.org/) can help you locate a nutritionist.
- Small Animal Clinical Nutrition 4th ed textbook has formulas for healthy pets and those with medical conditions.
- [Nutrition Consults <http://www.petdiets.com/>](http://www.petdiets.com/) (Dr. Remillard will formulate a specific diet for a fee.)
- UC Davis [Nutrition Support Service <http://www.vetmed.ucdavis.edu/vmth/small\\_animal/nutrition/default.cfm>](http://www.vetmed.ucdavis.edu/vmth/small_animal/nutrition/default.cfm)
- WALTHAM UCVMC-SD [Clinical Nutrition Program <http://www.ucvmc-sd.vetmed.ucdavis.edu/nutrition.cfm>](http://www.ucvmc-sd.vetmed.ucdavis.edu/nutrition.cfm)
- University of Tennessee Veterinary Nutrition Service (email [utvns@utk.edu](mailto:utvns@utk.edu) <<mailto:utvns@utk.edu>>)
- University of Missouri [Clinical Nutrition Service <http://www.vmeth.missouri.edu/clin\\_nu.htm>](http://www.vmeth.missouri.edu/clin_nu.htm)

**Recommended Pet Nutrition sites:**

- [PetDIETS <http://www.petdiets.com/>](http://www.petdiets.com/)
- [Vet Info <http://www.vetinfo.com/>](http://www.vetinfo.com/)
- [Pet Center <http://www.thepetcenter.com/imtop/nutrition.html>](http://www.thepetcenter.com/imtop/nutrition.html)
- [OSU Nutrition Support Service <http://www.vet.ohio-state.edu/nssvet.htm>](http://www.vet.ohio-state.edu/nssvet.htm)
- [BalanceIT <http://www.balanceit.com/>](http://www.balanceit.com/)

## **Dental Care:**

Brushing teeth every one to two days with dog/cat toothpaste (chicken, fish or other flavors!) is the #1 best way to limit onset (or slow progression) of periodontal disease. This may lessen the need for anesthetic dental cleanings in the future. Let us know if you would like further information or instruction on this. Dog and cat-specific toothbrushes are available (finger brushes to large ones), or you can use a **soft** human toothbrush, child-sized to large, depending on the size of your dog. You can work up to brushing 30 seconds or so daily. In a dog, you mostly need to concentrate on the outside surfaces of all the teeth -- the worst teeth TEND to be the big upper last premolars, and the canine teeth.

Alternative ideas to you brushing the teeth include "Easy Brush" -- we have a brochure about this product, a "self-brushing" rubber device that you would apply toothpaste to its bristles, and let them chew on their own. Also for dogs, there are "CET" chews (an enzyme-treated rawhide), or for cats "Enzadent" chews. These will help both mechanically to lessen plaque presence, and enzymatically to ward off bacteria and prevent formation of tartar. Additionally, offering crunchy veggies like raw carrots or pieces of broccoli, or apple slices are ways to mechanically help to lessen build-up of plaque that becomes tartar. In some cases, we use prescription dental diets that are designed to help decrease the amount of bacteria in the mouth and also to physically remove oral debris.

There is a natural dental spray "Oral Care Spray" for dogs or cats; see website, PetzLife.com; this is applied daily to help slow progression of plaque and associated bacteria build-up on the teeth. This is a possible alternative to brushing teeth if that is not possible.

## **Ticks:**

Natural Defense Flea/Tick: <http://www.sentrynatural.com/products.html> (we have their spray and squeeze on)  
contains: peppermint oil, cinnamon oil, lemon grass oil, clove and thyme oil.....

Happy Tails Flea the Scene: <http://www.happytailsspa.com/Flea-the-Scene>

Pal Dog Outdoor Spray: [http://www.palldog.com/sprays\\_balms.htm](http://www.palldog.com/sprays_balms.htm) (great for mosquito repellent - dogs & people!)

It is unlikely that any homemade or "Natural" flea and tick control product works as well as Frontline or Vectra for protection, especially if fleas and ticks are heavy. BUT, there are many other reasons that it may certainly be to your pet's best interest to use more natural products...

Here is one **"recipe"** for "Natural Flea and Tick Prevention":

10 drops geranium essential oil  
5 drops lavender essential oil  
5 drops grapefruit essential oil (could also use lemongrass)  
5 drops tea tree oil  
1/2 oz carrier oil, like almond or jojoba  
Combine ingredients in a 15 mL brown glass bottle.

Shake to mix before each use.

To apply, pour out only a couple drops, rub it between your hands, then rub lightly all over the furry parts of the dog, except the face, starting with the neck and chest (simply because that's where people tend to find most ticks on their dogs).

Also rub a drop or two into your dog's collar. If in heavily ticked areas, apply the oil twice daily. In the city, you may get away with every other day or once a daily use, depending on their activities, and the time of year ...

Some people use eucalyptus, citronella, peppermint, pennyroyal and/or cedar, but these oils may have some harmful effects on mucous membranes and/or can be a skin irritant, which is why it is often recommend to avoid them.

## **Heartworm Disease Prevention:**

We do not recommend non-ivermectin products to prevent heartworm disease.  
There is an option to give **less** of the prevention over mosquito season as follows:

Begin regular heartworm prevention **every 6 weeks** from May 15 through November 15 (or Jan.1 if "warm fall weather) -- this approach works because the medication reaches / treats backwards for 6 weeks.

General information about Ivermectin:

1. ivermectin is a natural molecule derived from a bacterium.
2. it is used at a dose that is about 1/50 of the dose we use for the treatment of sarcoptic mange so it is a very tiny dose
3. despite the fact that it is given once monthly, it is not in the body that long contrary to popular belief. It is eliminated from the body in a few days.
4. The alternative heartworm prevention is a strong (potentially toxic) substance, black walnut, that has to be given 5-7 days of the week. This is NOT a traditional indication for this herb, so the safety of ivermectin is actually much more well established than the safety of black walnut.