

VOLUME 10
NUMBER 6

The Whole



Dog Journal™

A monthly guide to natural dog care and training

June 2007

\$5.95

FEATURES

3 Now We're Cooking!

How to formulate and prepare a complete and balanced home-cooked canine diet.

10 Health Handbooks

Fortify your library with titles on holistic health and healthcare (conventional and complementary) for dogs.

12 Cats and Dogs, Living Together

Creating a harmonious household that includes dogs and other animals takes more than luck. Here's how to keep the peace between species.

16 Cancer Therapy Update

Two promising treatments are newly available for canine cancer.

20 Recall Redux

"Rolling recalls" just keep coming . . . What's a dog parent to do?

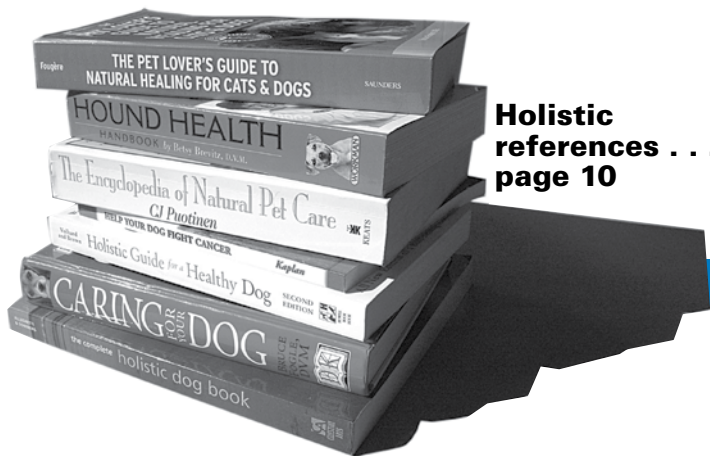


**Canine Home Ec . . .
page 3**



**BFFs . . .
page 12**

Photo by / courtesy of
Jenny Garifalos



**Holistic references . . .
page 10**

ALSO IN THIS ISSUE

- 2 Editor's Note
- 22 Letters From Readers
- 24 Product and Expert Resources

Ch-Ch-Ch-Changes

Repeat after me: Problems bring opportunities.

BY NANCY KERNS

Last month, I mentioned that I was going to attend Petfood Forum, an industry conference held annually in Chicago. As it turned out, it was the perfect place to be while news was breaking daily about expanding recalls. All the players were there: manufacturers, ingredient suppliers, testing labs, and pet food company executives. It was an ideal place to be a fly on the wall – at least, until I gave the talk (“Scrutinizing Super-Premium Pet Foods”) that I was invited to present!

Given my general anxiety (I’ve never given a talk to a room full of people before), I may not be the best judge of the reception I received. It’s a fact that the room was full; my talk was well-attended. But it seemed to me that the audience, though polite, was also awfully quiet, almost grim. Well, the industry is taking its lumps right now, and I might have been just laying it on thicker at a time when they’d rather not be reminded about the importance of ingredient quality.

To their credit, I saw nothing but genuine contrition and concern from industry reps about the recalls. I also never met or heard anyone at the meeting who appeared to be more concerned with covering their butts or “spinning” the news. Instead, I heard many, many discussions about how to change “business as usual” in the industry, how to improve ingredient testing and tracing, product recalls, and consumer relations. Given the presentation I saw given by an industry analyst, indicating that the most robust growth in the pet food market is in the “natural, holistic, organic” sector, I get the feeling that the postures that I witnessed were authentic.

I’m sorry that certain articles that have been lurking on the “what’s ahead” box on page 24 have not yet been forthcoming, whereas other unanticipated articles keep cropping up! With their long production lead times, monthly magazines are not ideally positioned to cover breaking news stories like the pet food recalls, but we’ve been doing our best to cover these important issues in as timely as matter as possible – even if it has caused some chaos in our lineup. Long-overdue articles on essential fatty acids, puppy classes, and lipomas will appear as soon as possible.

Cooper, the Australian Shepherd who appears with me in the photo below, died on April 25 at the age of 13. He was my father-in-law’s dog, although in recent months he had been living with my husband and me in our part-time home in Oroville, as my in-laws were preparing to sell their house.

I’ve provided vacation dog care for Coop for a decade, and borrowed him frequently for product testing and modeling duty – he was a *perfect* model and could learn a new trick to perform for the camera within minutes. Besides chewing up a few dog beds, I can’t think of anything he *ever* did wrong. I’ll miss his cheery, goofy, sweet face – in person and in the magazine – more than I can say.



NK

MISSION STATEMENT: WDJ’s mission is to provide dog guardians with in-depth information on effective holistic healthcare methods and successful nonviolent training. The methods we discuss will endeavor to do no harm to dogs; we do not advocate perpetrating even minor transgressions in the name of “greater good.” We intend our articles to enable readers to immediately apply training and healthcare techniques to their own dogs with visible and enjoyable success. All topics should contribute to improving the dog’s health and vitality, and deepening the canine/human bond. Above all, we wish to contribute information that will enable consumers to make kind, healthy, and informed decisions about caring for their own dogs.

The Whole Dog Journal™

EDITOR-IN-CHIEF – Nancy Kerns
 TRAINING EDITOR – Pat Miller
 PUBLISHER – Timothy H. Cole
 CIRCULATION DIRECTOR – Lisa Evans

EDITORIAL OFFICE

E-MAIL: WholeDogJ@aol.com
 MAIL: PO Box 1349
 Oroville, CA 95965
 PACKAGES: 1655 Robinson Street
 Oroville, CA 95965

SUBSCRIPTION SERVICES

PHONE: (800) 829-9165
 INTERNET: whole-dog-journal.com/cs
 U.S. MAIL: PO Box 420235
 Palm Coast, FL 32142-0235
 CANADA: Box 7820 STN Main
 London, Ontario N6Y 5W1

BACK ISSUES, WEBSITE INQUIRIES

PHONE: (800) 424-7887
 E-MAIL: customer_service@belvoir.com
 INTERNET: whole-dog-journal.com
 U.S. MAIL: PO Box 5656
 Norwalk, CT 06856-5656

REPRINTS

For price quote, contact Mona Kornfeld at
 (203) 857-3143
 Minimum order 1,000

SINGLE COPY SALES

Lisa Evans, (203) 857-3100

**WHOLE DOG JOURNAL
 DOES NOT ACCEPT
 COMMERCIAL ADVERTISING**



THE WHOLE DOG JOURNAL (ISSN #1097-5322) is published monthly by Belvoir Media Group, LLC, 800 Connecticut Avenue, Norwalk, CT 06854-1631. Robert Englander, Chairman and CEO; Timothy H. Cole, Executive Vice President, Editorial Director; Philip L. Penny, Chief Operating Officer; Greg King, Executive Vice President, Marketing Director; Marvin Cweibel, Senior Vice President, Marketing Operations; Ron Goldberg, Chief Financial Officer; Tom Canfield, Vice President, Circulation; Michael N. Pollet, Senior Vice President, General Counsel. Periodicals postage paid at Norwalk, CT and at additional mailing offices. Copyright ©2007, Belvoir Media Group, LLC. All rights reserved. Reproduction in whole or in part is strictly prohibited. Printed in U.S.A. Revenue Canada GST Account #128044658. Canada Publishing Agreement Number #40016479.

THE WHOLE DOG JOURNAL makes every effort to provide information on dog health, care, and treatment that is authoritative, reliable, and practical. It is not intended, however, to replace diagnosis or treatment from a veterinarian or other qualified dog professional. THE WHOLE DOG JOURNAL does not assume any legal responsibility. Readers should always consult qualified healthcare providers for specific diagnosis and treatment.

Subscriptions: \$39 annually (12 issues). Bulk rate subscriptions for organizations and educational institutions available upon request.

Postmaster: Please send address changes to THE WHOLE DOG JOURNAL, PO Box 420234, Palm Coast, FL 32142

THE WHOLE DOG JOURNAL, PO Box 39, Norwich, ON, N0J 1P0

Now We're Cooking!

Home-prepared diets for those who eschew raw feeding.

BY MARY STRAUS

Those of us who feed our dogs a raw diet that includes bones believe that this is the healthiest, most natural diet dogs can eat. But not everyone is comfortable feeding such a diet to their dogs. You may worry about bacteria or parasites in raw meat, or about feeding bones, or you may have a dog who doesn't enjoy or do well on a raw diet.

If you prefer to feed your dog a cooked diet, or a diet that includes raw meat but no bones, that's fine. Your dog will still benefit from a variety of fresh foods in proper proportions, regardless of how they're prepared. For simplicity's sake, these diets are often referred to as cooked diets, but the meat portion may be fed raw if you choose.

Cooked diets that do not include bone are a little more difficult in terms of making sure that all of your dog's nutritional needs are met. We can supply the calcium that bones provide from other sources, but it is

hard to know exactly which other nutrients present in fresh bone might be missing in a bone-free homemade diet.

In addition, cooking destroys or reduces certain nutrients, such as vitamins C and E and taurine. Cooking in water also leaches out minerals, though this can be resolved by feeding the water the food was cooked in. Light cooking at lower temperatures has less effect on nutrient value than cooking foods until they are well done.

While dogs (particularly adult dogs) can survive on a wide variety of diets, this article will give you guidelines for optimal nutrition, to help your dogs live the longest, healthiest lives possible.

Review: three basic rules

As discussed in the first two installments of this series ("Have Dinner In," April 2007 and "A Raw Deal," May 2007), the three most important rules of home-prepared diets apply to cooked diets, too:

What you can do . . .

- Remember that at least half the diet, and preferably more, should come from animal sources.
- Always feed a variety of different foods, not the same foods all the time.
- Be sure to include organ meats and eggs in your homemade diet.
- You must add calcium in appropriate amounts when you feed a homemade diet that does not include bone.



Many owners who are new to preparing their dogs' food feel most comfortable when omitting raw bones, instead utilizing cooked grains, ground muscle meats (cooked or uncooked), and supplements. With time, and great results, many grow bolder and eventually embrace diets comprised mostly of raw meaty bones.

■ **Variety:** A homemade diet must include a variety of different foods, not just meat and grains. It's best to feed many different types of meat (beef, lamb, pork, chicken, turkey, fish, etc.), as well as other foods such as organs, eggs, yogurt, and healthy leftovers.

Most people who feed cooked diets also feed grains or starchy veggies. If you do, make sure that meat and other animal products make up at least half the diet, and preferably more. Remember that dogs do not require carbohydrates, and they do not supply as much nutrition to dogs as animal products do.

■ **Balance over time:** When you feed a wide variety of different foods, there is no need to make each meal "complete and balanced." Think of how you eat yourself, and how you feed your children, providing different foods at different meals and on different days. Make sure your dog gets everything he needs over a week or two, not at every meal.

■ **Calcium:** One of the most common mistakes that people make when feeding a home-cooked diet is the failure to add calcium. *You must add calcium when you feed a diet that does not include bones.*

Adult dogs need around 800 to 1,000 mg of calcium per pound of food fed. They also require the calcium to be supplied in a proper proportion to phosphorus.

The ideal calcium:phosphorus ratio in the canine diet is between 1:1 and 2:1. Meat contains a lot of phosphorus, so the more meat a diet contains, the more calcium will be required to reach the correct calcium:phosphorus ratio. Adding 800 to 1,000 mg of calcium will provide the correct calcium:phosphorus ratio even for a high-meat diet, unless you use a calcium supplement that also contains phosphorus. In that case, moderately higher amounts of calcium may be needed to balance out the additional phosphorus contained in the supplement.

Ground eggshell can be used as a calcium supplement. Rinse eggshells and dry them on a counter overnight, or in the oven, then grind them in a clean coffee grinder. One large eggshell provides one teaspoon of ground eggshell, which contains 2,000 mg of calcium, so add ½ teaspoon ground eggshell per pound of food fed. Don't use eggshells that haven't been ground to powder, as they may not be absorbed as well.

You can use other types of calcium supplements (any form of calcium is fine). Calcium from seaweed, such as Animal Essentials' Natural Calcium, also supplies other minerals (including magnesium, iodine, and selenium) that are beneficial.

Bone meal is frequently used as a source of calcium in diets that don't include raw bone. However, bone meal contains calcium *and* phosphorus. Different brands of bone meal supplements contain different amounts of calcium and phosphorus, but the calcium:phosphorus ratio is always the

same: 2:1. To balance a diet that contains *lots* of phosphorus, then, such as one that contains mostly meat, you will need to give an amount of bone meal that will provide 1,000 to 1,200 mg calcium per pound of food to keep the ideal calcium:phosphorus ratio in the diet correct.

Look for bone meal supplements that are guaranteed to be free of lead and other contaminants. You can also use a purified bone extract called Microcrystalline Hydroxyapatite (MCHA), but most of these supplements also contain vitamin D in high amounts, which would *not* be appropriate to use (see supplements section further on in the text).

Another option is to use a supplement designed specifically to balance a limited diet, including supplying the proper amount of calcium. Wysong's Call of the Wild supplement is meant to balance an all-meat diet that does not include bone. Call of the Wild derives some of its value from whole foods. Balance IT is another supplement created to balance a limited, incomplete homemade diet.

One last option is to use a dog food pre-mix to which you add meat, eggs, dairy, and other healthy foods. These pre-mixes will include calcium and other nutrients to balance out the fresh foods that you add. ("Have Dinner In," WDJ April 2007, has more information on pre-mixes.)

If you feed meat with ground bone, there is no need to add calcium. (See "A Raw Deal," May 2007, for more information about diets containing ground bone.)

When you use supplements or pre-mixes designed to balance a limited diet,

you should restrict the amount of liver you feed to no more than half the amount recommended below, due to high levels of vitamin A. Also, do not add cod liver oil (or other source of vitamin D) or kelp (due to the risk of excess iodine, which can interfere with thyroid function), unless the pre-mix instructs you to do so.

Remember that you should never feed cooked whole bones, unless they have been cooked into mush in a pressure cooker or by boiling for many hours. (This will only work with some chicken bones; other bones remain too hard no matter how long you cook them, though you can add some vinegar to the water to help leach out some of the calcium into the food.)

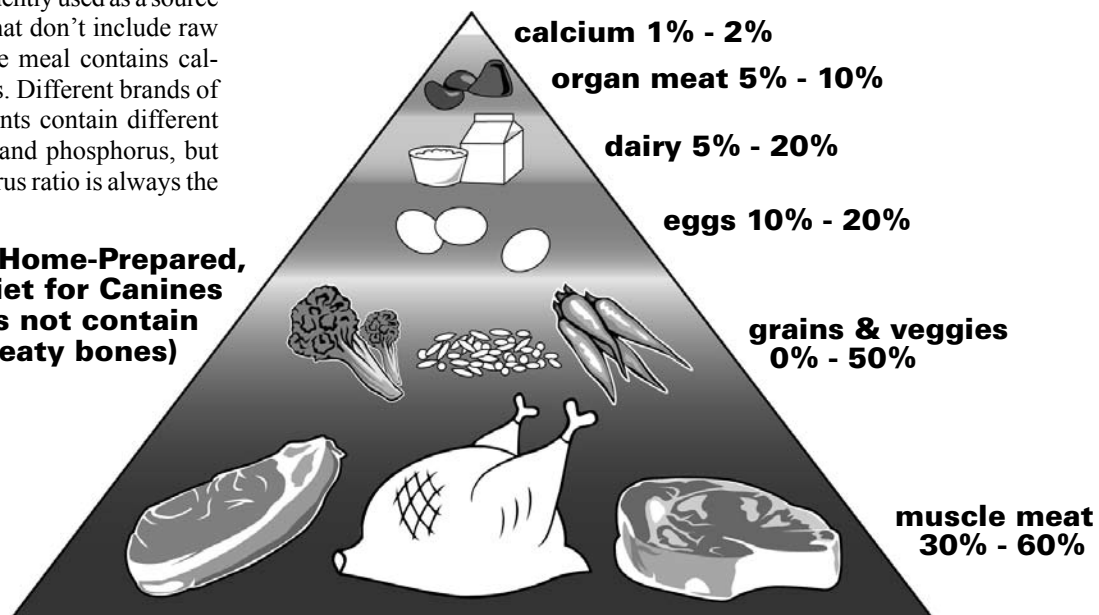
You *can* cook meat-based foods that contain ground bone, but this is not ideal. Cooking food that contains a large amount of ground bone can lead to constipation or even impaction. That's why cooking ground-up necks, backs, wings, etc. – or commercial blends that contain ground bone – is inadvisable. Either feed this ground food raw, or add in an equal amount of meat (without bone) to lower the percentage of bone in the mix.

Again, when bones are fed, you don't need to add calcium to the diet.

Types of foods, proportions

When feeding a homemade diet, it is essential that different types of foods be fed in appropriate proportions. Meat, eggs, dairy, and other animal products should make up at least half of the diet, and preferably more. The diet needs to include organ meats as well as muscle meat.

Pyramid for a Home-Prepared, Cooked Diet for Canines (one that does not contain raw meaty bones)



Liver and **kidney** should make up 5 to 10 percent of the total diet. It's best to feed small amounts daily or every other day, rather than large amounts at one time. Because these organs are so nutrient-dense, use the raw weight to determine the amount to feed.

For example, if you feed a total of 20 ounces of food daily, use 1 to 2 ounces of raw liver/kidney, even though the cooked weight will be less. If possible, make **heart** (nutritionally, more of a muscle meat) another 5 to 10 percent of the diet, or even more, though too much may lead to loose stools in some dogs.

Eggs are an excellent source of nutrition. They can be soft-boiled, hard-boiled, gently scrambled, etc., or fed raw, if your dog likes them that way. You can feed as many eggs as you want, as long as you still feed lots of variety.

Dairy products, such as yogurt, kefir, and cottage cheese, are well tolerated by most dogs and offer good nutritional value. Yogurt and kefir have the added advantage of providing beneficial bacteria (probiotics). These products should be added after the food is cooked. Goat's milk may be tolerated by dogs who have problems with cow's milk.

Muscle meat from a variety of sources such as beef, lamb, pork, chicken, and turkey should make up most of the rest of the diet. It can be fed ground or in chunks. You can also feed canned fish, such as jack mackerel, pink salmon, and sardines, once or twice a week. (There is no need to add calcium to those meals since the bones are included.)

Vegetables are optional, but provide many benefits. Leafy greens are among the healthiest veggies to feed; other good veggies include broccoli, cauliflower, brussels sprouts, bok choy, cabbage, turnips, rutabaga, celery, cucumber, bell peppers, zucchini and other summer squashes, carrots, and more. Spinach and swiss chard can be fed in limited amounts.

These veggies provide few calories, so I usually advise adding them on top of the amount of food you feed, rather than calculating them as a percentage of the diet.

Steaming is the best way to cook vegetables, as it removes fewer nutrients than boiling. You can add the water used to steam or boil veggies to the meal, as it will contain the minerals that were leached out during cooking (add leftover meat drippings, gravy, soups, sauces, etc., to make a savory broth). Some vegetables may cause

Sample Daily Cooked Diet and Supplements

Remember that it's not necessary to feed a balanced diet every day, as long as the diet is balanced over time. For example, it would be fine to feed eggs one day alternating with organ meat the next, rather than feeding both foods every day. Or you might feed just muscle meat one day, with a mix of organ meat, eggs, and dairy the next.

Following are suggested amounts for a 40-pound dog. Adjust as needed for your individual dog, keeping in mind that, on average, larger dogs will eat less for their weight, and smaller dogs more.

- 8 to 12 ounces muscle meat/heart/fish/leftovers (raw or cooked weight)
- 1 to 2 ounces liver or kidney (raw weight before cooking)
- 1 to 2 eggs (daily or every other day)
- 1 to 4 ounces yogurt, kefir, or cottage cheese
- 2 to 8 ounces grains (cooked weight) or veggies (no more than half the diet)
- 1,000 mg calcium (for example, ½ tsp ground eggshell, or 1 tsp Animal Essentials Natural Calcium, or 1 tsp NOW bone meal, which has 1,000 mg calcium per rounded teaspoon).

Sample daily supplements (optional)

- 2 fish oil capsules (400 to 600 mg combined EPA and DHA)
- 200 IUs vitamin E (required at least once a week if giving oils)
- ⅛ to ¼ tsp green blend
- 500 mg vitamin C (preferably sodium ascorbate or calcium ascorbate, rather than ascorbic acid) once or twice a day
- Vitamin B-50 complex once or twice a day
- Cod liver oil in an amount yielding 100 to 200 IUs vitamin D
- ½ tsp organic apple cider vinegar mixed with ½ teaspoon raw honey
- 1 clove fresh crushed garlic
- 1 to 2 Tbsp nutritional yeast

gas if fed to your dog in large portions.

Grains, legumes (beans), and starchy vegetables (such as potatoes, sweet potatoes and winter squashes) are usually included in cooked diets, but remember that dogs do not require carbohydrates in their diet, and plants supply incomplete proteins for dogs. If you do feed them, it's best if they're a small percentage of the diet, around one quarter or less. At a maximum, carbohydrates should never make up more than half the diet, with the other half coming from animal sources.

Grains that can be fed to dogs include white rice, brown rice, oatmeal, barley, amaranth, quinoa, and bulgur. Just as with other foods, feeding a variety of different grains and carbs is better than always feeding the same kind. Remember that grains contribute to weight gain and sometimes other health problems. If your dog is overweight or suffers from allergies, arthritis, seizures, urinary incontinence, IBD, or other digestive disorders, you may want to try feeding a diet without grains or starchy carbs to see if your dog improves.

Fruits can be added to the diet in small amounts. Overripe fruits are easier to digest. Don't feed grapes or raisins, which cause kidney damage to some dogs if too many are eaten. Good fruits to feed include apples, bananas, papayas, mangoes, berries, and melon.

Remember that you can also include **healthy leftovers** (foods you would eat yourself) from your own meals in the diet you feed your dog.

Putting it together

While meals can be prepared individually, you may find it easier to cook up large batches at one time, and then divide the food into meal-sized portions and freeze. Because variety is important over time and not necessary at every meal, you can feed the same foods for a week or two, and then switch to something else when you make the next batch.

It's best to add most supplements at the time of feeding, rather than mixing them in ahead of time, since many vitamins and other nutrients are affected by freezing or

by exposure to light or air. The probiotics found in yogurt and kefir will also not survive the freezing process.

You can add herbs and spices if your dog likes them, but not onions, which can cause anemia in dogs. The small amounts in leftovers shouldn't be a problem.

Amounts to feed

One of the first questions that comes up when anyone wants to switch to a homemade diet is, how much should I feed? There are guidelines that can help you figure out a starting amount, but remember that each dog is an individual. The amount of food needed by each dog will vary considerably depending on his activity level and metabolism, and such factors as the amount of fat in the diet. Keep a close eye on your dog's weight whenever you switch diets and adjust the amounts you feed up or down as needed, increasing or decreasing no more than 10 percent at a time.

It's healthier for dogs of all ages to be lean rather than plump. If you have a dog who is relatively inactive, or tends to gain weight easily, you can reduce the amount of fat in the diet by removing skin and visible fat from poultry, and by feeding leaner meats and low-fat dairy products. For dogs that need a very low-fat diet due to chronic pancreatitis or fat intolerance, boiling meat will remove most of the fat.

As a general rule, dogs will eat around 2 to 3 percent of their body weight in fresh food daily (use cooked weights for foods that are cooked). Large dogs will tend to eat a lower percentage and small dogs a higher percentage of their body weights. Toy breeds may need as much as 4 to 5 percent of their body weight daily, while giant breeds might eat as little as 1 ½ percent, or even less.

I start with around 2 pounds of food a day for a 100-pound dog (2 percent of their body weight), 1 to 1 ½ pounds of

food for a 50-pound dog (2 to 3 percent of body weight), ½ to ¾ of a pound (8 to 12 ounces) of food for a 25-pound dog (2 to 3 percent of body weight), and 5 to 6 ½ ounces of food for a 10-pound dog (3 to 4 percent of body weight). When making your calculations, remember that ounces are not the same as tenths – 1.5 pounds is not 21 ounces (1 pound 5 ounces), it is 24 ounces (1.5 x 16).

If you feed two meals a day, divide the total amount in half for each meal. If you know your dog is very active, tends to be on the thin side, or eats more now than would be expected for his age and size, then start with higher amounts and feed fattier foods. If you have a couch potato, or a dog who is overweight or gains weight easily, start with less and feed lower-fat foods. Again, watch your dog's weight closely, using a scale if possible, and adjust as needed.

Note that leafy green veggies supply few calories, so don't count them in when calculating the amount of food to feed, but add them on top of the rest of the diet. If you have a dog who is overweight and likes veggies, this is one way to increase the amount of food that she can have without causing weight gain.

The fat content of the diet will affect the amount you feed. Most dogs should have a moderate amount of fat in their diet, which means limiting meats that are really high in fat, such as 75 percent lean ground beef and some ground lamb and pork products. When feeding poultry (e.g., chicken, turkey, duck), remove visible globs of fat, and maybe some of the skin as well, particularly if your dog isn't very active.

If you find you need to feed less than

Foods to Avoid or Restrict

The following foods should be restricted (used sparingly) in a canine diet:

- **Garlic:** beneficial in doses up to 1 small clove per 20 pounds of body weight, but can cause anemia if given in larger quantities.
- **Potatoes (the regular kind, not sweet potatoes), tomatoes, peppers (all kinds), and eggplant** may aggravate arthritis pain, but are otherwise fine to feed. Grains and starchy veggies may also aggravate arthritis and other forms of inflammation.

While most foods safe for people are also safe for dogs, there are a few notable exceptions. Here are some foods you should *not* feed your dog:

- **Onions:** can cause a form of anemia. Reaction is dose-dependent and can build up over time. Small amounts are not harmful, but there's no reason to feed them.
- **Macadamia nuts:** toxic to dogs, even in very small amounts.
- **Chocolate and caffeine:** toxic to dogs.
- **Xylitol,** a natural sweetener, is toxic to dogs.
- **Grapes and raisins:** can cause kidney failure in a few dogs for unknown reasons if fed in large amounts; 3 to 6 ounces per 20 lbs of body weight is the lowest amount known to have caused toxicity. Many dog owners use grapes and raisins – in small amounts – as a training treat or snack and have seen no ill effects; others feel the potential for danger exceeds the value of feeding grapes or raisins. Most important: Do not leave bunches or grapes or boxes of raisins anywhere your dog might be able to get them. Most cases of grape toxicity occurred when a dog "stole" a large ration.



Help him by not letting him help himself to grapes!

the amounts recommended above to keep your dog at a healthy weight, try reducing the amount of fat, so that he can have more food in order to get the nutrients that he needs (but don't feed a really low-fat diet, as that will cause your dog to feel hungry all the time).

On the other hand, if you find yourself having to feed more than would be expected for your dog's size, you can increase the amount of fat. Working dogs and those who are very active and have trouble keeping weight on will benefit from a higher-fat diet. Keep in mind that dogs do not have problems with high cholesterol, so that is not a concern if you need to feed a high-fat diet.

Grains and starchy carbs can also affect weight. Dogs who have trouble maintaining their weight on a normal amount of food may benefit from added carbohydrates, while reducing them can help those who need to lose weight.

Making the switch

Most dogs have little problem switching to a home-cooked diet. If your dog is prone to digestive problems, you may want to make the change gradually. Add just one new ingredient at a time and wait a few days to see how your dog does before adding something else new, gradually increasing the amount of new food and decreasing the amount of the old.

If you add a lot of new ingredients at one time and your dog develops problems, it's harder to tell what the cause might be. If your dog vomits or has diarrhea, return to his prior diet and make the change more carefully once his digestive system is back to normal. That may include feeding the new food separately from the old (at least a few hours in between meals), and feeding only one new food at a time, to see if your dog reacts to any of the new ingredients.

Supplements

The choice of whether or not to add supplements is an individual one. Healthy dogs fed a wide variety of fresh foods in appropriate proportions should have no need of supplements, though they may still benefit from them. The less variety you feed, the more necessary supplements become. Cooked diets are more likely to need supplementation, since cooking destroys or reduces some nutrients. Dogs with health problems may also benefit from certain supplements regardless of their diet.

The most important supplement is fish



Michael Allaire, of Berkeley, California, washes front paws and muzzles after his five dogs have spent a half-hour pulling meat from raw, meaty beef bones. This helps keep the rugs in the house nice!

body oil (not liver oil), such as salmon oil or EPA oil. This supplies omega-3 fatty acids, which provide a variety of benefits and are hard to find in any diet, whether homemade or commercial. The recommended dosage for healthy dogs is around 1 gram (1,000 mg) of fish oil per 20 to 30 pounds of body weight (dogs with certain health problems may benefit from higher doses).

When fed in doses high enough to supply the recommended amount of EPA and DHA, fish liver oil would contribute too much vitamin D. Restrict the amount of fish liver oil you feed your dog so that it does not contribute more than 100 IUs of vitamin D daily for a small dog (400 IUs daily for a large dog). Do not add cod liver oil or other sources of vitamin D to any commercial diet, as most are already high in vitamin D.

Note that flaxseed oil and carmelina oil are not good choices to replace fish oil, as the form of omega-3 fatty acids found in plant oils (alpha linolenic acid, or ALA) must be converted in the body to the forms that dogs can utilize (EPA and DHA). At best, dogs probably convert 15 percent of ALA to EPA and DHA; at worst, none of it. Fish, grass-fed meats, and eggs are also good sources of omega-3 fatty acids.

Whenever you add oils of any kind, you need to supplement with vitamin E, or the body will become depleted of this vitamin over time. Give around 100 IUs to a small dog (under 25 lbs), 200 IUs to a medium-sized dog (25 to 60 lbs), and 400 IUs to a large dog (more than 60 lbs), anywhere from daily to once a week.

Minerals are tricky to supplement, as

they can be dangerous at excessive levels, or if they are not balanced properly with other minerals. For example, zinc binds with copper, so if you give a supplement that includes zinc but not copper in proper proportions (10:1), eventually this can lead to a copper deficiency.

Minerals are most safely supplemented in whole food form. Green blends that contain foods such as kelp, spirulina, Irish moss, fenugreek seed, and alfalfa are an excellent source of trace minerals. (Note that it is important not to give too much kelp, as it is high in iodine and too much can suppress the thyroid.) It's best to give kelp in very small amounts – ¼ teaspoon or less for a large dog.

Organic apple cider vinegar, nutritional or brewer's yeast, and dark molasses also supply trace minerals. Other fresh food supplements that may provide benefits include raw honey, ginger (especially good for digestion), and fresh crushed garlic (no more than 1 small clove per 20 pounds of body weight daily; more can cause anemia).

You may want to add **probiotics**, especially if your dog is stressed or ill, has been treated with antibiotics, or has had diarrhea. Supplements with multiple strains of beneficial bacteria are preferable to plain acidophilus. Digestive enzymes are also helpful for some dogs with gastrointestinal problems.

Puppies

The nutritional requirements of puppies vary from those of adults, and deficiencies (or excesses) are more likely to cause harm. Puppies need more protein, fat, calcium, and phosphorus than adult dogs do, but too much calcium can lead to serious orthopedic problems. This is especially true for young (prior to puberty), large-breed puppies. These increased needs continue as long as your puppy is growing, and are highest during periods of peak growth.

The exact amount of calcium that puppies require is a matter of endless debate among nutritionists. I'll outline the most prominent recommendations, and suggest an approach that should result in your home-prepared diet falling into the middle of these ranges.

The 2006 National Research Council (NRC) guidelines recommend that puppies receive 3 grams (3,000 mg) of calcium per 1,000 kcals, which is four times its recommended amount for adult dogs. The

minimum requirement was changed to 2,000 mg/1,000 kcals from its 1985 minimum of 1,600 mg/1,000 kcals.

The nutrient guidelines published by the Association of American Feed Control Officials (AAFCO) express the recommended amount in a different way, suggesting that puppy diets include between 1.0 and 2.5 percent calcium on a dry matter (DM) basis.

Some nutritional research suggests that large-breed puppies have optimal skeletal development and mineralization when fed a diet that contains between 0.8 and 1.0 percent calcium (DM), as long as the diet uses high biological value protein (from animal products) that provides 420 kcals per 100 grams of food. The percentage of calcium needed increases when caloric density is increased (higher-fat diets), so that the total amount of calcium per calorie remains the same. The percentage of calcium needed also increases when more grains are fed, since the phytates in grains bind calcium.

Studies have shown that skeletal abnormalities and lameness can result in large-breed puppies fed more than 2.6 percent calcium (DM), or more than 6,500 mg calcium per 1,000 kcals. Minimum amounts are less well-defined, but problems may occur when diets contain

less than 0.6 percent calcium (DM). The amount of vitamin D in the diet will also have an effect, since it increases the absorption of calcium. Small-breed puppies can tolerate a much wider range of calcium than large-breed puppies without developing problems.

Here's my suggestion: If you add an amount of bone meal that provides between 1,000 and 2,000 mg of calcium per pound of food fed (not counting any low-calorie veggies), this should provide adequate but not excessive calcium. If you cook the meat, use the cooked weight to determine how much calcium to add.

The higher amount of calcium in that range (2,000 mg per pound of food) will meet both NRC and AAFCO guidelines, providing between 2,000 and 4,000 mg of calcium/1,000 kcals and 1.6 to 2.0 percent calcium DM based on the diet recommendations I've given.

The lower amount (1,000 mg per pound of food) will provide between 0.8 and 1.0 percent calcium, which some feel is most appropriate for large breed puppies. This is lower than NRC and AAFCO minimums, but not low enough to cause deficiencies. Remember, you need to add more calcium per pound of food fed if you use a high-fat or high-grain diet.

Because puppies also need more phos-

phorus than adult dogs, I suggest using bone meal for a calcium source, rather than a calcium-only supplement. (Again, bone meal contains calcium and phosphorus in a ratio of 2:1.)

If your dog's diet provides calcium in amounts that fall at the low end of the ranges suggested by experts, it's advisable to supplement the diet with vitamin D, which enhances calcium uptake. (Don't use calcium supplements that contain vitamin D, though, as the amounts will be too high). If you want to do your own calculations, you can analyze the diet you're feeding using a nutrition analyzer (see "Resources for a Homemade Diet," next page).

Remember that if you feed a diet that includes ground bone in appropriate amounts, there is no need to add additional calcium or phosphorus, as bone supplies both minerals in the right proportions. (Isn't nature wonderful?)

Puppies also require more protein than adult dogs. Remember that there is no danger in feeding high-protein diets to puppies. The best thing you can do for large- and giant-breed puppies is to keep them lean and slow-growing by limiting the total amount fed, not by limiting the percentage of protein in the diet.

Most puppies will do well on a diet that has a moderately high amount of fat.

Home-Prepared Diet Builds Strong Puppies

Christie Keith of San Francisco, California, has raised Scottish Deerhound puppies using Dr. Richard Pitcairn's Growth Diet C (see "Home-Prepared Diet Resources," next page), with certain modifications.

Keith had one dog with severe grain allergies. She consulted with Dr. Pitcairn about the advisability of modifying his diet plan so she could use vegetables in place of the grains in the recipe, and he agreed that this was fine. Keith later substantially reduced the volume of carbohydrates as well, using 1 cup of sweet potatoes, for example, instead of 3 cups of grains, but continued to add the same amount of supplements specified in the recipe.

"I replaced the grains with a lesser volume of a combination of cooked and raw veggies, especially sweet potatoes," says Keith. "I think it's better that way. I have raised three litters on this substituted recipe with no problems."

Keith follows Pitcairn's supplement suggestions, giving bone meal, nutritional yeast, cod liver oil, vitamin E, iron, and Healthy Powder according to the guidelines given, but says, "I leave the C out of the Healthy Powder and supplement directly with Ester-C or sodium ascorbate powder." She also substitutes fish body oil for the vegetable oils in the recipe.

"I've had good results using this recipe for my puppies and nursing moms," says Keith, "but I am always open to

new information and wouldn't hesitate to modify this diet if I learned something new."

CHRISTIE KEITH'S VERSION OF DR. RICHARD PITCAIRN'S "GROWTH DIET C"

- 1 cup sweet potatoes, cooked
- 2 cups (1 lb) beef chuck, chicken or turkey with skin, or lamb
- 1 or 2 eggs (optional)
- 1 cup low-fat cottage cheese or yogurt
- 2,400 mgs of calcium (from bone meal)
- 2 Tbsp Healthy Powder (recipe given below)
- 1 Tbsp nutritional yeast
- 2 fish oil gelcaps (or ½ tsp liquid fish oil)
- 2 tsp cod liver oil
- 400 IUs vitamin E (poke capsule with pin and squeeze contents onto food)
- 10 mgs iron (optional but I would use it)
- 1,000 mgs taurine (open capsule and sprinkle it over food; also optional)

DR. PITCAIRN'S RECIPE FOR HEALTHY POWDER (KEEP REFRIGERATED)

- 2 cups nutritional yeast
- 1 cup lecithin granules
- 1/4 cup kelp or alfalfa powder
- 9 grams (9,000 mg) calcium (used to balance out the phosphorus in the Healthy Powder)

Puppies need more fat than adult dogs, but too much can lead to rapid growth (if they get too many calories), or limit nutrition (if you have to feed less than the normal amount to control growth). If you have a very active puppy who eats more than would be expected for his age and size, then you can increase the amount of fat in his diet. Don't feed a low-fat diet to a puppy.

Figuring out how much to feed a puppy will depend on the pup's age as well as current weight and anticipated adult weight. Puppies eat much more for their weight than adult dogs do, and young puppies eat more for their weight than older puppies do. That's one of the reasons why it's important to feed younger puppies three to four meals a day.

The amount fed to puppies should gradually increase from a little over half of the appropriate adult serving (when the

puppy is very young) to close to the adult ration (for older puppies). Here's what that would translate into based on percentage of current weight:

1/4 grown: 4.5 to 6.5 percent of current body weight (55 percent of adult diet)

1/2 grown: 3.5 to 5.25 percent of current body weight (88 percent of adult diet)

3/4 grown: 2.75 to 4 percent of current body weight (100+ percent of adult diet)

Fully grown: 2 to 3 percent of their body weight daily (100 percent of adult diet)

Small-breed puppies reach their adult weights more quickly than large breeds do. A small-breed puppy will eat as much as an adult by the time she's around three months old. A large-breed puppy will eat as

much as an adult by the time she's around 5 months old. In both cases, they'll eat a little over half that amount at 8 weeks of age. Small breeds will eat a higher percentage of their body weight daily than will larger breeds.

Keep in mind that the appetite of puppies is notoriously varied – they eat more when they're in a growth spurt and less when they're dealing with hormones and teething – so it's important to pay attention to the individual dog and adjust as needed. It's best for puppies to be lean, not chubby, especially the large breeds; keeping them lean will decrease the likelihood of hip dysplasia and other orthopedic problems developing. Adjust the amount of food as needed to keep your puppy at the proper weight, with ribs easily felt and not covered in fat.

The rewards

Feeding a cooked diet takes time and may cost more than feeding packaged foods (though it's possible to keep costs down by shopping sales and ethnic markets, and buying food in bulk), but the rewards are many. Dogs fed properly prepared homemade meals are usually healthier than dogs on commercial kibble or canned diets, and you may find your vet bills are reduced. There is much joy in watching our dogs eat fresh, healthy meals we have prepared ourselves, knowing the quality of the ingredients and the value they provide, as well as the obvious enjoyment our dogs get from their food.

Carol Morgan of Mauldin, South Carolina, expressed the feeling very well. "I home cook for my two dogs, both Australian Shepherds," says Morgan. "Six-year-old Rowdy gets 100 percent home-cooked, and eight-year-old Tillie gets kibble supplemented with home-cooked. Both dogs also get some raw fruits. Getting started was a very big undertaking; I spent a lot of time on the Internet and reading books while designing their diets. When my vet next saw my dogs, she called everyone into the office to see them because of the obvious improvement in their health. I will never go back to 100 percent commercial dog food again." 🐾

Mary Straus does research on canine health and nutrition topics as an avocation. She is the owner of the DogAware.com website. She lives in the San Francisco Bay Area with her dog Piglet, a 15-year-old Chinese Shar-Pei.

Resources for a Homemade Diet

NATS Nutritional Analysis Tools and System

Select NATS ver 2.0 and enter the foods you're using in the diet to determine the number of calories you're feeding. nat.crgq.com

Dr. Pitcairn's Complete Guide to Natural Health for Dogs and Cats, by Richard Pitcairn, DVM
The 1995 edition contains his Growth Diet C for puppies; the newer 2005 edition does not. (Dr. Pitcairn comments: "In the prior editions we had two classes of recipes, (one) for growing animals and (one) for adults. It became easier to just up the protein levels of the adult recipes and to make the recipes suitable for both groups.") Check your library or half.com to find the older edition.

CALCIUM SOURCES

Animal Essentials Natural Calcium

Made and sold by Animal Essentials. animalessentials.com, (888) 463-7748

NOW Bone Meal Powder

Made by NOW Foods. nowfoods.com, (888) 669-3663

Wysong's Call of the Wild

Made and sold by Wysong; also available at many pet supply stores. This supplement is meant to balance an all-meat diet. wysong.net, (800) 748-0188

Balance IT

Made and sold by DVM Consulting. This supplement is meant to balance a limited, incomplete diet. balanceit.com, (888) 346-6362 or (530) 756-3862 outside the U.S.

GREEN BLENDS

All Systems Go! Total Health Aid

Made and sold by Aunt Jeni's, auntjeni.com, (301) 702-0123.

Animal Essentials Organic Green Alternative Herbal Blend

Made and sold by Animal Essentials, animalessentials.com, (888) 463-7748.

Berte's Green Blend

Made and sold by B-Naturals, b-naturals.com, (866) 368-2728

Solid Gold Seameal Powder

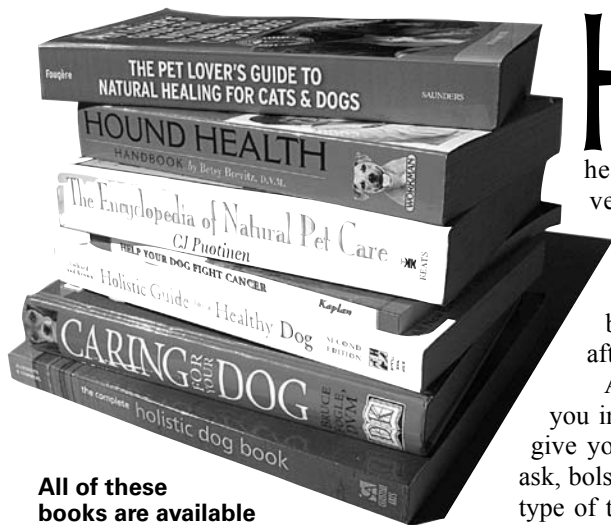
Made by Solid Gold. solidgoldhealth.com, (800) 364-4863

See the author's Web page (dogaware.com/dogfeeding.html) for more information on books about home-feeding and supplements.

Health Handbooks

Fortify your library with titles on canine holistic health and healthcare.

BY NANCY KERNS



All of these books are available from your favorite bookseller.

Having a solid library, or at least a shelf or two full of good books, is a great hedge against making uninformed decisions about your dog's health. Of course, a trip to your veterinarian is your first line of defense when something is obviously wrong with your dog. But we suggest hitting the books for information before and after vet visits.

A good health handbook can help you interpret what your vet tells you, give you ideas for further questions to ask, bolster your argument for a different type of treatment, and give you a list of invaluable home healthcare practices you

can put into place to speed your dog's recovery – or better yet, prevent problems in the first place.

One challenge is finding health-oriented texts that are not dogmatic in their insistence on conventional medical approaches to the exclusion (if not derision) of all else. I've seen complementary and alternative approaches succeed where conventional medicine has failed too many times to throw the puppy out with the bathwater. The books highlighted here take a truly holistic, inclusive approach to healthcare.

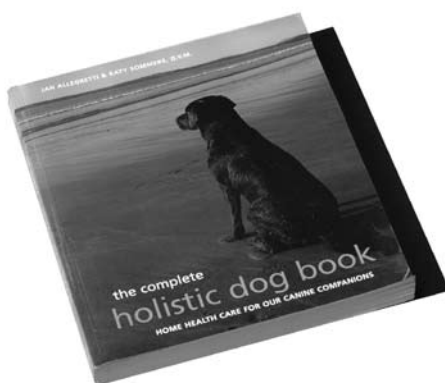
I have several \$300 veterinary textbooks on my office shelves for reference and fact-checking articles, but it's amazing how frequently I find the answers I am looking for in the following books!



■ *Caring for Your Dog*, by Bruce Fogle, DVM. 2002, DK Publishing, Inc. 448 pgs.

Only conventional medical approaches are discussed in this book, but it's the most complete, well-researched, and well-illustrated general dog health book I've seen. Hundreds of color photos and medical illustrations help owners visualize the conditions and anatomy discussed. Amazingly, Dr. Fogle is refreshingly *not* hostile to home-prepared diets.

And no kidney stone goes unturned! The book contains at least a *bit* of helpful information about every medical condition I've ever needed to look up.



■ *The Complete Holistic Dog Book*, by Jan Allegretti and Katy Sommers, DVM. 2003, Celestial Arts. 372 pgs.

This book succinctly and convincingly describes the benefits (and basics) of a healthy lifestyle and holistic healthcare for dogs. Healthy diets and complementary modalities (acupuncture, chiropractic, homeopathy, and herbal medicine) are described and indications for their best use are suggested. The section on the "holistic medical chest" will be useful to owners who are new to providing safe, effective home treatments for their dogs.



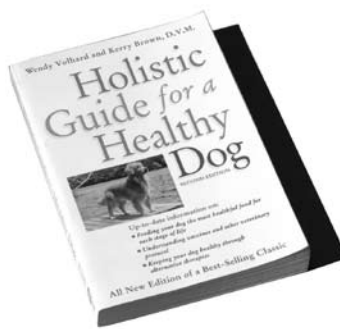
■ *The Pet Lover's Guide to Natural Healing for Cats & Dogs*, by Barbara Fougère, BVSc. 2006, Elsevier Inc. 628 pgs.

The design of this book is a little odd, but once you get past this superficial aspect, you'll discover a wealth of suggestions on conventional and complementary treatments for numerous health conditions. Home-prepared diets and supplements are discussed in depth, and overall, Dr. Fougère's treatment philosophies closely complement ours! As the title suggests, feline care is covered, too.



■ **The Encyclopedia of Natural Pet Care**, by CJ Puotinen. 2000, McGraw-Hill. 544 pgs.

My copy of this book (pictured above) is a first edition; a newer edition was published in 2000. Written by longtime WDJ contributor CJ Puotinen, this book is calm, warm, and encouraging. It gently helps inspire owners to take increasing responsibility for their animal companions' health, through improved diet and less-toxic care practices. Puotinen describes opportunities for owners to use flower essences, herbs, supplements, and hands-on therapies to make a palpable improvement in their dogs' health. The book also includes interviews with a number of high-profile holistic veterinarians.



■ **Holistic Guide for a Healthy Dog**, by Wendy Volhard and Kerry Brown, DVM. 2000, Howell Book House. 314 pgs.

Wendy Volhard was one of the pioneers of home-prepared diets for dogs, and is still considered a guru for those feeding a certain type of diet. She and Dr. Brown are strong proponents of grains in canine diets, which may not jibe with other authorities' opinions, but the authors do have decades of experience and terrific results behind them.

Sections on less-mainstream modalities such as kinesiography and homeopathy are well-described. The section on thyroid and adrenal abnormalities and treatments for these conditions is worth the price alone.



■ **Hound Health Handbook**, by Betsy Brevitz, DVM. 2004, Workman Publishing. 468 pgs.

Only conventional medical care is recommended in this book, so you have to take suggestions on diet and vaccinations with a grain of sea salt. But Dr. Brevitz's descriptions of the causes and symptoms of so many medical problems earns this book a place on our shelf. Also, we applaud her inclusion of a chapter on mental health and behavior problems; many veterinarians fail to consider these as "health" issues, even though the problems are responsible for the loss of millions of dogs' lives (through euthanasia). A list of common physical health problems endemic in an alphabetical list of breeds is another highly valuable tool.



■ **Help Your Dog Fight Cancer**, by Laurie Kaplan. 2004, Jan-Gen Press. 120 pgs.

Obviously, this book is not a general health guide. But the author does such a thorough job in describing the total care program needed to help her dog through a long fight with cancer, that literally every type of healthcare is discussed.

Kaplan discusses diagnostic tools, various cancer treatments (conventional and alternative), how to interpret lab tests, and how to communicate with veterinarians and make informed medical decisions. She also does an especially good job of describing (and illustrating with photos!) how she formulated and prepared a homemade "anticancer" diet for her dog (who, by the way, outlived his diagnosis by years). 🐾

WHOLE DOG JOURNAL READER SERVICE:

TO VIEW OUR WEBSITE:

Visit us at
whole-dog-journal.com

FOR BACK ISSUES, ARTICLES:

Visit us at
whole-dog-journal.com/backissues

TO CHANGE YOUR MAILING OR E-MAIL ADDRESS, RENEW YOUR SUBSCRIPTION, CHECK PAYMENT STATUS, OR ASK QUESTIONS ABOUT YOUR ACCOUNT:

Visit us at
whole-dog-journal.com/cs

Call (800) 829-9165

To change your address by mail, attach your present mailing label to this form (or a copy of this form), enter your new address below, and mail it to:

THE WHOLE DOG JOURNAL
P.O. BOX 420235
PALM COAST, FL 32142

Name _____

Company _____

Address _____

City _____

State _____ Zip _____

E-mail _____

To order or renew a subscription, enter your name and address above and check the subscription term you prefer:

2 years (24 issues) – \$54

1 year (12 issues) – \$29

In Canada, 1 year \$39 CDN, 2 years \$72 CDN. All other countries, 1 year \$47 US, 2 years \$94 US.

Check enclosed AmEx

MasterCard Visa

Card # _____

Expiration _____

Signature _____

YOUR RENEWAL IS JUST A CLICK AWAY!

whole-dog-journal.com/cs

Cats and Dogs, Living Together

Creating a harmonious multi-species household takes more than luck.

BY PAT MILLER

You've no doubt heard the phrase "fighting like cats and dogs." As well-known as the saying is, it's also an often inaccurate one. Millions of dog-lovers share their hearts and homes with feline family members with nary a scratch between the species.

On the other paw, stories of dogs killing cats are fact, not fiction, and many unfortunate Rowdy Rovers have suffered ulcerated corneas, scratched nose leathers, and infected puncture wounds from Tough Tiggers who decided that "fight" was a better strategy than "flight." What determines the difference between Fido and Fluffy amicably sharing the sofa and one or both ending up at the emergency clinic – or worse?

The media likes to play up stories about personality differences between "cat lovers" and "dog lovers," but many of us are both. We may also fill our lives with one or more small animal companions including

rabbits, rats, ferrets, guinea pigs, iguanas, fish, finches, macaws, and a multitude of other creatures. It's our responsibility and obligation as their guardians to ensure that they have a safe, reasonably low-stress environment in which to live – sometimes a large challenge when we're asking predator and prey species to live in harmony. Whether the multi-species household is one big happy family or not depends on reasonable adoption decisions, careful introductions, good management, training and behavior modification, and a little – or a lot – of luck.

Sensible adoption selections, careful introductions

When we found our Scottish Terrier running loose in Chattanooga as a stray at age seven months, we were impressed with how well he adapted to our household. Despite warnings from other Scotty owners about the breed's propensity for attacking cats, Dubhy couldn't have been

What you can do . . .

- Do some research before adding a new species to your family, so you can make adoption choices that have the greatest likelihood of success.
- Recruit friends and family to assist you in orchestrating careful introductions.
- If your animal companions already have undesirable associations with each other, commit to a training and behavior modification program to create peaceful relationships.

- Use failsafe management protocols to protect everyone.



Gabby, a three-year-old American Staffordshire Terrier, and 16-year-old Scrapy. The cat is feral, and until a recent health crisis, lived outside; their owner credits Gabby for nursing the cat back to health. Photo by/courtesy of Lori Fusaro, Los Angeles.

better behaved with our two geriatric felines. However, a year later we brought home an eight-week-old stray kitten, and Dubhy came close to committing kitty mayhem when we foolishly assumed he'd be fine with her. Perhaps we were unwise to keep Dubhy if we wanted to be able to adopt future cats safely, or perhaps it was the choice to bring home a new kitten that was foolish.

Lulled into a false sense of complacency because Dubhy was so good with our adult cats, I ignored the sound advice I give so often to others about carefully orchestrated introductions, and walked into the house with the foundling kitten in my arms. (The *right* way to accomplish this is detailed in "Carefully Orchestrated Introductions," page 14.) Five dogs charged up to me in greeting, and the kitten did a classic Halloween cat imitation, complete with arched back, bottlebrush tail, and

alarmingly loud hissing and spitting. While our other four dogs backed off in awe and respect, this highly arousing stimulus immediately turned on Dubhy's "fierce predator" switch.

Had we introduced Viva to the dogs one at a time, at a distance, with the canines carefully restrained, she probably would have reacted much more calmly, and Dubhy might never have "turned on" to her. Feeding treats to dogs and cat at the same time might have helped create an "other species makes yummy treats happen!" association. Once the predatory association was made, however, it was too late to un-ring the bell. We would have to work to repair the damage.

To maximize your chances for harmony between species, it's smart to select individuals who have a high likelihood for compatibility. Since terriers were originally bred to rid barns, homes, and fields of unwanted rodent pests, it may be unwise to adopt a rat – or even a cat – as a pet, unless you are prepared to do a significant amount of very careful management – or you know your Parsons Russell Terrier well enough to be confident that he's not a typical representative of his breed and won't present a serious risk to Ricky Rat.

It's also smart to select younger, rather than older. If you want a dog who will be trustworthy around other small animal species, you're generally better off starting with a pup and raising him to know only appropriate behavior around other animals. It's much more challenging to change inappropriate behaviors and associations in an adult dog than it is to create appropriate ones initially in a young dog. Alternatively, to keep life simple you can choose to adopt a dog who has a known history of living peacefully with other types of animals.

Of course there are exceptions to the species-compatibility rule. Decades ago my very gentle torti-tabby cat, Tofu, lived in perfect harmony in my bedroom with my breeding pair of canaries and their clutch of nestlings. She never even cast yearning glances at them. Long before I knew anything about behavior modification, I was proud of my success in getting predator and prey to live together peacefully.

Truth be told, this was more a case of luck – Tofu was a very nonpredatory cat – than any skill on my part. I looked forward to a long and happy canary-raising hobby – until the day my roommate's cat accidentally got shut in the room. When I returned from work at the end of the day



While this kitty is clearly a cool customer (and experienced with dogs), the Pointer's intense focus on the cat indicates an urgent need for CC&D.

I was devastated to find only beaks and claws scattered about the carpet. I had failed my vulnerable charges.

When you're contemplating adding a new family member, be wise. If your dog has a history of killing cats in your backyard, a feline may not be the best choice for you, especially if you intend to let your cat outside (not something I recommend, but that's a different discussion). On the other hand, some dogs who chase – and kill – cats outdoors can live safely with their own cats indoors, where the cats are less likely to run and thus trigger the predatory response. Still, it's a greater compatibility risk than a dog who shows no desire to chase/attack cats.

Good management

I thought I was doing a darned good job of managing the risks to my tiny avian family's safety. I was wrong – and they paid for it with their lives. Fortunately we did a far better job of managing Dubhy's behavior with the eight-week-old kitten who triggered his hardwired Terrier prey behavior. We expect Viva, now age three, to live a long and happy life with us. She and Dubhy are fast friends these days, no management necessary.

Good management requires effective barriers (doors, baby gates), sturdy

containment units (crates, pens), restraint (leashes, tethers), and unwavering supervision (your eyeballs and awareness). However, all of your management tools are only as good as your ability to ensure their use. A moment's lapse can result in beaks and feathers instead of warm breathing beings, and sooner or later there's likely to be a lapse.

If your children (or roommates) aren't good at heeding your warnings to keep doors closed, or if your talented canine can open doors, you might need to add self-closing springs, child-proof latches and/or padlocks to your list of management tools. You're likely to be more successful in the long run commingling species if you combine a foolproof management plan with an effective program of training and behavior modification.

Good management, good training

After taking emergency management precautions with our new kitten, I set to work creating the associations I should have arranged from the start. I did a boatload of counter-conditioning, feeding high-value treats nonstop when Viva was in Dubhy's presence, quietly restraining him if he lunged at the tiny cat (I'll describe how to conduct counter-conditioning and desensitization sessions in a moment). By the end of the first session Dubhy was lying at my feet, not taking his eyes off the kitten, and happily munching treats.

The next day my husband was hospitalized, and I had neither the energy nor the heart to work on the Dubhy/kitten relationship. I kept them separated while I divided my energies between hospital, home, and training center.

Five days later, I was ready to address the challenge again, and prepared for another difficult evening. With Viva safely on the back of the sofa, I brought Dubhy into the room. Bless his little Scottish heart, he was clearly excited to see the kitten again, but he looked at her, then laid down on the floor at my feet and looked up at me, clearly saying "Okay, where's my treat?"

The rapid progress continued over the next few sessions. There were tears in my eyes at the conclusion of session five as I watched Dubhy and Viva lying together on the sofa, with the tiny black feline occasionally taking a playful swipe at Dubhy's nose with her paw, and Dubhy declining to take offense. Even when she raced across the room, a sure trigger for a

predatory chase, Dubhy controlled himself – key: controlled *himself* – I didn’t have to say a word. He jerked forward as if to take off after her, then thought better of it, settled back onto his blanket and looked at me. And yes, he got a big delicious treat jackpot!

Counter-conditioning and desensitization

We talk about the process of counter-conditioning and desensitization (CC&D) a lot in WDJ articles. That’s because it’s such an effective behavior modification tool that it can be applied successfully in an almost endless number of behavior challenges.

All living things – at least those with a

central nervous system – learn and respond to their environment through two primary pathways: classical (or respondent) conditioning and operant conditioning.

With operant conditioning, the dog operates on the environment. That is, the dog does deliberate behaviors in an effort to make good stuff happen and bad stuff go away. For example, your dog chooses to offer a sit because he knows there’s a good chance it will result in you paying attention to him and perhaps feeding him a tasty treat.

With classical conditioning, the environment operates on the dog, triggering a response as a result of a prior association between two stimuli in the dog’s experi-

ence. Something happens in the dog’s world and the dog has an emotional and/or biological response.

For example, your dog hears the “click!” of the clicker and starts to salivate because his brain has made the association between the click! and the arrival of a yummy morsel. He doesn’t have to think, doesn’t have to decide to salivate – it just happens. He also wags his tail and gets happy – all automatic responses because of his association between click! and treat.

A dog’s desire to chase something that moves is an innate, hardwired behavior; it doesn’t have to be learned. It is certainly stronger in some dogs than others, due to genetic influence. We have intentionally bred some dogs to be more turned on by movement than others; herding dogs, terriers, and sighthounds leap to mind. Still, it’s the association between the presence of the cat and the dog’s experience that cats often run away that make the feline a high-arousal chase object.

We use counter-conditioning to change the association with a stimulus. If we can replace the “cat = rousing game of chase/kill” association with “cat = totally delicious treat from human” association we have “countered” the prior association with the new one. (In Australia I heard it called “reverse conditioning,” which makes a lot of sense.)

Classical and counter-conditioning are both happening all the time. When you click and treat your dog for sitting, operant conditioning happens. The dog learns that he can sit to get you to click the clicker, so he sits more often. He’s also associating the sound of the click with food, and associating training in general with good stuff – having fun with you and eating treats.

However, when your dog is in the throes of a strong emotional response – high arousal, fear, great excitement – operant conditioning goes out the window. This means that when your dog is barking and lunging at your cat, or chasing your ferret madly through the house, he is unable to respond to your cues to come or lie down. It’s not that he’s deliberately ignoring you; he truly can’t think clearly enough to register and act on your cue.

That’s why changing the dog’s emotional response is a much more effective way to modify his behavior than yelling at him, or asking him to perform an operant behavior. When his emotions are under control, then he can sit when you ask him to, but not before that.

Carefully Orchestrated Introductions

Your chances of a successful multi-species relationship are best if you plan their introductions carefully. It’s rarely wise, although it sometimes works, to simply march in with a new family member and, in essence, “throw her to the wolves.” Far better to have both (or all) nonhuman family members safely restrained and have the introduction be a positive classical conditioning experience (or counter-conditioning if one or more of the participants have some prior association with the other’s species).

Here’s an example of a well-orchestrated introduction. For other species, substitute “other” for “cat” and figure out how to alter the process as appropriate. For example, “snake in tank” rather than carrier, and at some point human would hold the snake, rather than releasing her to roam around freely. Depending on participants, the processes described could take several weeks, or could occur all in one session.

PARTICIPANTS: DOG AND CAT, TWO HUMANS

- Have cat in carrier.
- Place carrier on floor on far side of room.
- Enter with one dog on leash.
- Do classical conditioning (feed treats!) with both dog and cat at subthreshold distance until both are offering conditioned emotional responses (CERs) in the presence of the other.
- Decrease distance between dog and cat and repeat process to obtain CERs.
- When both are comfortable when the dog is in close proximity to the cat in her crate, return to the original distance and remove the cat from crate (but keep her restrained, ideally on harness and leash).
- Repeat CC&D process until dog and cat are comfortable in close proximity, both restrained.
- Return to original distance and release cat (dog is still restrained).

You will find that some species are more difficult to incorporate in the process as anything more than a silent presence. Because of the feeding habits of snakes, for example, it would be difficult to do CC&D with a snake as the dog enters the room and approaches the snake’s tank. In this case you may just have to settle for desensitization (becoming accustomed to the increasing intensity of the stimulus – the dog) without the classical conditioning (association) part.

The sequence of events that is most likely to produce effective counter-conditioning is this:

1. Stimulus (cat) appears at sub-threshold distance, which is the distance at which the dog sees the cat and becomes alert but doesn't start barking and lunging.
2. Owner begins feeding bits of high value treats to the dog as long as the cat is in view near threshold distance. (I like to use chicken for this as it is very high value for most dogs).
3. Cat disappears from view.
4. Owner stops feeding treats.
5. Repeat these four steps until when the cat appears, your dog looks at you with a big "Where's my chicken?" grin on his face. We call this a "conditioned emotional response" or CER. When you have a consistent CER at your starting distance, you can decrease the distance slightly and repeat steps 1 through 4. Every time you obtain consistent CERs you can increase the intensity of the stimulus – bring the cat closer, have the cat move a little faster, introduce two cats . . .

The process of changing the association from inappropriate to appropriate is the counter-conditioning part. Increasing intensity of stimulus is the desensitization part. Done well, you end up with a dog and cat (or chinchilla, parrot, snake, tarantula) living safely together, just like Dubhy and Viva.

Combined approach

Despite our stunning success in a very short time – who says positive methods take longer? – we continued to manage Dubhy with Viva by keeping them in separate rooms when we weren't home to directly supervise, until the baby cat was six months old and better able to fend for herself. Viva's healthy presence in our lives today is testimony to the effectiveness of our management and modification efforts.

Dubhy hasn't lost one whit of his terrier gameness, however, as demonstrated recently. We share our farm with a fair number of black snakes, which is more than fine with me. I actually love snakes, and they are a big help with our resident wild rodent population. A few weeks ago I

Shelby, a 60-plus-year-old Native Arizona Desert Tortoise, hibernates in an underground burrow each winter. Debbie McQueen of Desert Hills, Arizona, makes sure to reintroduce Shelby to her cattle dogs, Chaco and Pecos, when the tortoise emerges from his burrow each spring. Photos courtesy of Debbie McQueen.



concerned to remove one or more species from your household. This is a painful decision for any animal lover – and a very selfless one. It's not easy to put the welfare of your cat, hamster, or cockatiel above your own emotional connection and feelings of commitment and responsibility. You may feel

heard a Scottie commotion in the backyard while I was cleaning stalls in the barn. By the time I arrived to see what the fuss was about he had, much to my dismay, killed a six-foot black snake that was crossing the yard. Guess I won't be keeping any snakes as pets in the near future!

If you combine basic good manners training with your program of counter-conditioning and desensitization you're even further ahead. The better you and your dog can communicate to each other, the more effectively you'll be able to control his behavior when the need arises.

Lucy, our Cardigan Corgi, is also fond of chasing cats, albeit from the herding dog "Whee, it's fun to chase and round up things that move!" perspective rather from the terrier "KILL!" motivation. Although her motive is gentler, she is still capable of making the cats' lives miserable. Counter-conditioning worked for her as well, but while Dubhy has completely given up any "kill" association with Viva, Lucy still yearns to chase our cats when they move. Her well-practiced "leave-it," "come," and "down" cues give us an added layer of insulation against inappropriate cat tormenting.

Rehoming

There may come a time when you decide that it's in the best interests of all

guilty that you perhaps haven't done as much to make the situation work as you could – or should – have.

But with someone's life is at risk, rehoming really is the best choice. This will give the at-risk pet a better chance for a long and happy life and remove much stress from your own home, thereby improving the quality of life for all your remaining family members, including yourself.

There must be millions of successful multi-species households, so chances are good that if you put your mind to it, you can make it work for yours. Take time to make wise adoption choices, orchestrate careful introductions, implement good management and training programs. If you do all this, you will likely succeed in your desire to turn your home into a peaceable kingdom, where lions lie down with lambs – or at least cats and dogs can live peacefully with canaries, rabbits, and boa constrictors. 🐾

Pat Miller, CPDT, is WDJ's Training Editor. Miller lives in Hagerstown, Maryland, site of her Peaceable Paws training center. She is also the author of The Power of Positive Dog Training and Positive Perspectives: Love Your Dog, Train Your Dog. For book purchasing or contact information, see "Resources," page 24.

Cancer Therapy Update

Two promising treatments are now available for canine cancer.

BY CJ PUOTINEN

Despite everything modern medicine has to offer, cancer remains among the most feared of canine diseases.

Just over a year ago, WDJ reviewed conventional, complementary, and alternative cancer therapies in a series of articles (“Canine Cancer Crisis,” November 2005; “Conventional Cancer Care,” December 2005; “Don’t Despair, Just Care,” January 2006, and “What Are the Alternatives?” February 2006) Since then, a cancer vaccine has been approved for veterinary use and a new version of an old herbal salve has become a “first choice” for many holistic veterinarians. Here’s what’s new.

Melanoma vaccine

Most vaccines are designed for prevention, but a new type is designed to treat active disease. The U.S. Department of Agriculture recently approved such a vaccine for the treatment of canine melanoma.



Gerald Post, DVM, a veterinary oncologist and founder of the Animal Cancer Foundation, and Smokey, his own companion and patient.

“Everything about this vaccine is unusual,” says Gerald Post, DVM, a Norwalk, Connecticut, veterinary oncologist and founder of the Animal Cancer Foundation. “In addition to being therapeutic rather than preventative, it contains human DNA. Injecting an animal with DNA from a different species can effectively stimulate an immune response that attacks cancer cells.”

The vaccine is a result of collaboration between human and veterinary oncologists at the Animal Medical Center in New York City, Memorial Sloan-Kettering Cancer Institute, and the drug’s manufacturer, Merial.

Melanomas are usually solitary black tumors, and those appearing on the mouth or nail bed are usually malignant. Dr. Post understood the prospects all too well when, four years ago, he noticed a tiny lesion on one the toes of his own Miniature Schnauzer, Smokey.

“It was metastatic melanoma,” says Dr. Post. “When I saw the x-rays and biopsy report, I was devastated. It had already spread to his lungs, and the average survival time for dogs with this type of cancer is about three months.”

Smokey, who was 12½ years old at the time, was such a healthy, vibrant dog that Dr. Post worked frantically to save him.

“At that time the melanoma vaccine was still very new and experimental,” he says, “but I didn’t hesitate to try it as everyone I consulted agreed that it looked like our best hope. I was really pleased when he lived an additional two and a half years. The vaccine didn’t cure him, and eventually the tumor came back, but it gave him extra time and an excellent quality of life. The result was far more than I had dared to hope for when I first made the diagnosis.”

What you can do . . .

- Inspect your dog often for signs of cancer, especially around the mouth and feet.
- If your dog develops melanoma, consult your vet about the melanoma vaccine and other treatments.
- For information about Neoplasene, have your veterinarian order the product’s clinical guide.
- Before agreeing to any treatment, study its side effects, costs, and caregiver responsibilities.



Dr. Post was particularly pleased because Smokey never experienced an adverse side effect. “In the beginning Smokey received the vaccine every two weeks for two months,” he says. “After that, he got it once a month or so. Smokey responded really well, and throughout his therapy, you would never know that anything was wrong or that he was under any kind of treatment.”

In this respect, Smokey was like most patients. “I’m loathe to say that no dog will ever have an adverse side effect,” says Dr. Post, “but adverse reactions are very, very rare. None of the 50 or more dogs that I sent to the Animal Medical Center to receive the vaccine over a period of four to five years experienced any adverse side effects that I’m aware of.”

According to Dr. Post, the ideal candidate for the melanoma vaccine is a dog whose condition is discovered early, before it metastasizes, when it can be well controlled locally. “Obviously,” he says, “the earlier you find the disease, the better. You

don't want to wait until it has spread."

In March 2007, the USDA issued a conditional U.S. Veterinary Biological Product License for the vaccine. During the conditional licensure period, Meril will conduct additional research supporting the vaccine's safety and effectiveness. During this time, it will be distributed by veterinary oncologists.

"I'm excited about the release of this vaccine," says Dr. Post, "because it's exactly the kind of medical breakthrough that the Animal Cancer Foundation was created to fund. It's an innovative, novel therapy, it treats a really serious problem, it's effective, and it helps not only dogs but people, too. The same technology that created the canine melanoma vaccine is being researched for human melanoma."

Neoplasene

Our February 2006 article ("What Are the Alternatives?") on alternative cancer treatments described bloodroot salves, also called black salves, which have been used in the treatment of many types of cancer in humans, dogs, cats, horses, cattle, and other animals. Salves containing bloodroot (*Sanguinaria canadensis*) are red when first made but turn dark or black with age, hence their common name.

Herbal treatments are popular because they are inexpensive (or at least less expensive than conventional treatments) and they are usually gentle, easy to use, and unlikely to cause adverse side effects.

"Bloodroot salves are generally less expensive than chemotherapy or radiation," says Deborah Cihonski, PhD, founder of a black salve Internet forum, "but that's where their similarity to other herbal therapies ends. Bloodroot salves are rarely gentle, and I always recommend that a veterinarian supervise treatment."

Dr. Cihonski, a pediatric psychologist who lives in Tampa, Florida, and Chicago, first heard of black salves from her Chicago veterinarian, Kimberly Curtis, DVM, when her young cat, Piper, was being treated for vaccine-associated fibrosarcoma.

"I had taken him to the University of Illinois veterinary oncology department," she says, "and they said there wasn't much they could do for his long-term survival. They suggested a very expensive treatment that involved leaving him there for nearly two months of radiation, chemo, and bone-removal surgery. This, they hoped, would allow him to live another three years at most."

Dr. Cihonski had lost several dogs to cancer after aggressive and heroic treatments. "These rarely worked out to anyone's favor," she says, "so I was open to alternatives for Piper."

Piper had received several months of herbal therapy when Dr. Curtis mentioned hearing about black salve, which she thought might be helpful for him. Dr. Curtis discovered Neoplasene and consulted with its manufacturer, Terry Fox, PhD, at Buck Mountain Botanicals in Miles City, Montana.

Traditional black salves are made with zinc chloride, a caustic chemical that burns the skin. In contrast, Dr. Fox uses zinc chloride to make a highly ionic solvent with which he extracts bloodroot's isoquinoline alkaloids. Although it is used in Neoplasene's production, zinc chloride is not contained in the final product. Neoplasene's bloodroot alkaloids comprise a small but vital portion of its ingredients. According to Dr. Fox, the isoquinoline alkaloids are modified in such a way as to cause diseased tissue to self-destruct preferentially, sparing healthy, normal non-cancerous tissue.

Four forms

There are four Neoplasene products: Neoplasene salve (which is also known as Sarcoma #1) for topical application; Neoplasene oral; and two types of NeoplaseneX for intravenous use or injection directly into tumors.

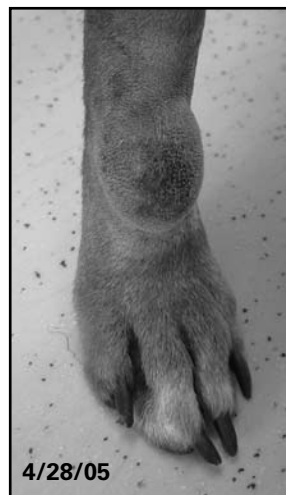
Dr. Curtis and Dr. Cihonski used Neoplasene salve to remove Piper's tumor, then switched to oral Neoplasene to complete his treatment.

"We did the same thing with my pet chicken, who had major tumors that were very vascular," says Dr. Cihonski. "We almost lost her in surgery so we had to explore other treatment options. The results were successful in both cases."

Throughout her study of alternative cancer therapies, she kept wishing that Neoplasene had been available years ago, when her Rottweilers suffered from osteosarcoma, hemangiosarcoma, and malignant histiocytosis. "I kept thinking that this could have helped them when nothing else did."

One year ago, Jackie, a three-year-old Jack Russell Terrier belonging to Dr. Cihonski's mother, Phyllis Cihonski, developed a tumor on her foot. "It was diagnosed as a histiocytoma," says Mrs. Cihonski. "These are most frequently benign and often disappear spontaneously. The only prescribed treatment was antibiotics for infection, and if necessary, the toe would be removed. I felt that treatment with the oral Neoplasene was preventative. Within days of beginning the treatment the tumor regressed and then disappeared. Jackie is a happy, active dog, and she still has all of her toes."

Although the application of Neoplasene is easy, Dr. Cihonski warns that it is best used by an informed consumer with the assistance of an experienced veterinarian. "The results are simply beyond what most people expect," she explains, "especially the topical salve. When a tumor falls off, it can leave a huge wound behind, and that can be very frightening. This was certainly true in the case of my own animals, whose wounds looked awful. However,



Remarkable results: The first photo (provided by Buck Mountain Botanicals) shows a soft tissue sarcoma before treatment. Four days after treatment with Neoplasene (middle photo), the tumor is separating. Seven months later, only a scar remains.

the wounds never became infected even though I didn't treat them with antibiotics or disinfectants. I just kept them clean and lubricated."

Lubricating salves or oils help speed healing and keep skin pliable.

It makes sense, says Dr. Cihonski, to start with oral Neoplasene because some tumors respond quickly, sparing patient and caregiver the inconvenience of extensive wound care. "You won't know until you try what the results will be," she says. "My chicken responded well to oral Neoplasene, but it did nothing for my cat. Some dogs get immediate results and others don't. In some cases of very aggressive or advanced tumors, topical application is the best line of defense.

"In some cases," she continues, "animal guardians have given their dogs oral, topical, or injected Neoplasene only to produce dramatic results that they did not consider positive. Some have stopped treatment altogether. The same is true for chemotherapy and radiation. When you're dealing with cancer, you're dealing with a serious, complicated illness. I wish there were a works-for-everything cancer treatment that is gentle, easy to use, 100 percent effective, entirely free from side effects, and painless, but if there is, I haven't found it."

For those interested in using Neoplasene, says Dr. Cihonski, the choice of treatment depends on the patient, the type of cancer, its location, and its stage of growth.

"For example," she says, "if you're treating a squamous cell carcinoma in the mouth, you may not have time to give the oral dosing and wait to see what happens. Some tumors are so fast-growing that you can literally watch them increase in size from one day to the next. If you start with oral Neoplasene and don't see results right away, you can switch to the topical salve, which works immediately. Multiple treatments are often required at 7- to 14-day intervals. The same is true for Neoplasene that's injected into tumors."

Clinical guide

To help veterinarians use Neoplasene correctly and help their clients understand what to expect, Dr. Fox provides a clinical guide for the treatment of neoplasm (abnormal tissue growth or tumors), proud flesh (soft, swollen, granulated tissue that develops over large surface wounds, especially in horses), and warts. Instruc-



Prior to treatment with Neoplasene, Izzy, a 10-year-old Rottweiler, had a huge, ugly, unidentified tumor on her leg. Twenty days post-treatment, the tumor was gone. However, what came between was not easy to look at.

tions for use precede case histories from a dozen holistic veterinarians, complete with graphic photos.

Conventional cancer treatments like surgery, chemotherapy, and radiation therapy often fail to remove or destroy active cancer cells while they simultaneously damage healthy, nonmalignant tissue.

"This often leads to failure," says Dr. Fox, "and the stoic acceptance that all that can be done has now been done, and euthanasia or animal suffering is inevitable. What has been needed is a drug that causes the destruction of all neoplasm, preferentially sparing healthy cells. Neoplasene's isoquinoline alkaloids appear to present just this effect."

According to Dr. Fox, the active principle in bloodroot's main alkaloid, sanguinarine, interacts with DNA while inhibiting adenosine triphosphatase. "These and other demonstrated mechanisms offer clues to the 'how does it work on neoplasm?' questions," he says. "There is a functional relationship between the death of neoplastic cells and exposure to Neoplasene."

The cases documented in Neoplasene's clinical guide include sarcoma, melanoma, osteosarcoma, mammary tumors, malignant liposarcoma, mixed cell chest tumors, malignant fibrosarcoma, papilliferous cystadenocarcinoma, nerve sheath tumors, spindle cell carcinoma, and various other tumors and growths in dogs, cats, and horses. The graphic color photos that accompany the case studies put wound treatment warnings into perspective; this therapy is not for the faint of heart.

Not without side effects

"I've been using Neoplasene for a year now," says Linda Faris, DVM, of Overland Park, Kansas, "and I'm very impressed with the results. My preference is definitely for the oral product. This is a liquid that

you place in a capsule just before giving it to the pet with food. I usually give my clients enough to treat their animals for a month and then check on their progress."

Dr. Faris acknowledges that injectable NeoplaseneX and topical Neoplasene can be highly effective, but she approaches both with reservations. "I've used the injectable version with mixed results," she says. "For a couple of my patients it proved too caustic, and they had anaphylactic reactions. These reactions seem linked to repeated exposure and individual sensitivities, but in general, I think the chances of having an adverse reaction are greater for the injectable or intravenous version. I'm also reluctant to use the topical salve because of resulting wound care management issues."

The most common side effect that Dr. Faris's patients experience with oral Neoplasene is nausea. "Some pets throw it up soon after they swallow it," she says. "That's the only adverse effect I've seen, and we either lower the dose or stop the treatment for those animals. In some cases, if we stop treatment for a while, we are able to start it back up with no problem."

Occasionally, Neoplasene is Dr. Faris's first choice for economic reasons. "Some clients are on such a tight budget," she says, "that other treatments are just not affordable. Neoplasene isn't free, but it's far less expensive than conventional cancer therapies and most alternatives."

One of her favorite success stories involves a small female Poodle with perineal adenocarcinoma that was impinging on her rectal canal. Thanks to oral Neoplasene, the tumor softened and shrank, and the dog is doing well.

"This was a serious case," says Dr. Faris, "because the tumor was beginning to interfere with her ability to defecate. Within a month, the tumor had softened and changed shape, and with continued

oral Neoplasene, it shrank. She's now on a maintenance dose of a small amount three times a day, and sometimes she only gets it twice a day. The prescription is for one-third of a c.c. every eight hours, and that's all this dog is on."

Holistic treatment required

For the dog's caregivers, an effective treatment that's easy to administer and costs only \$40 per month is a blessing.

More typical of Dr. Faris's patients is a Chow Chow with very advanced metastatic liver cancer. A multi-pronged approach is most effective in severe or advanced cases like hers.

"We're using several different treatments, not just Neoplasene, to try to manage the cancer," Dr. Faris says. "Last August the dog was given a 30-day prognosis, her condition was so serious. The surgeons who opened her up decided not to operate. Instead, they sent her home to die.

"Today, eight months later, you can't tell she's ever been sick. She honestly shows no symptoms. Her blood work is a mess, but you'd never know that by looking at her. She's active, happy, and leading a perfectly normal life. She has had to go off the Neoplasene a couple of times because of digestive upsets, but she's on it most of the time, along with Chinese herbs, glutathione therapy, alpha lipoic acid, liver support products like milk thistle, and a few other things."

All of Dr. Faris's cancer patients are on a no-grain diet that's as low in carbohy-

drates as possible. "I find that really makes a difference," she says.

Whenever she sees a cancer patient, Dr. Faris's goal is to extend the animal's life while improving the quality of that life.

"Some dogs with cancer don't come to me until they're at end stage," she says. "Unfortunately, I'm not able to do much except ease their transition. But those who come to me in time typically do very well."

Spreading the word

In addition to seeing her own patients, Dr. Faris consults with veterinarians around the world.

"In one case a woman in Great Britain got in touch with me because of an article I'd written about a case similar to that of her Northern Inuit. The dog had advanced histiocytic sarcoma, with large tumors that were actually rotting on her body. She had already been put on chemotherapy, but it made her so ill that they had to stop.

"Through the help of her local veterinarian, we were able to put the dog on Neoplasene and European mistletoe, another herb with cancer-fighting properties. That dog is a miracle. The tumors have all healed and regressed to nothing. Now, just a few months after she started treatment, you can't tell she has cancer."

For as long as people have been experimenting with black salves, some have taken them orally once or twice a year as a cancer prevention therapy. Dr. Faris considers a similar use of oral Neoplasene a sensible strategy for dogs at high risk

of developing cancer or experiencing a recurrence.

According to Dr. Fox, since its introduction four years ago, over 2,000 veterinarians worldwide, most of them in the United States and Canada, have prescribed Neoplasene for their cancer patients. "Considering that a single jar of the salve will treat 80 cats or a large number of dogs," he says, "this is a very affordable therapy."

In August 2006, New York City veterinarian Jill Elliot, DVM, told the *New York Post* that Neoplasene was changing her medical practice. One of her patients, a 10-year-old Belgian Shepherd named Athos, had been given six months to live by oncologists who removed his cancerous tumor. Dr. Elliot combined conventional and homeopathic treatments to keep Athos in remission until July 2006, when a new tumor appeared.

Dr. Elliot injected the growth with NeoplaseneX, and almost immediately, the tumor began turning white. "About five hours later," she said, "the sick tissue was literally dying and dripping off. This is so miraculous that I'm fully endorsing Neoplasene. With results like this, it's worth devoting the rest of my practice to it." 🐾

CJ Puotinen is author of The Encyclopedia of Natural Pet Care, Natural Remedies for Dogs and Cats, and other books (see "Resources," page 24 for purchasing information). She lives in New York with her husband, a Labrador, and a tabby cat.

Resources Mentioned in This Article

ORGANIZATIONS, MANUFACTURERS

Animal Cancer Foundation raises funds for veterinary cancer research. (347) 693-6882, acfoundation.org

Black Salve Cancer Open Forum, Deborah Cihonski, PhD
pets.groups.yahoo.com/group/theblacksalvecanceropenforum/

Buck Mountain Botanicals, Inc., Miles City, MT
Sells Neoplasene and other herbal products to licensed veterinarians. Terry S. Fox, Ph.D., P.E. (406) 232-1185, BuckMountainBotanicals.com

Merial U.S., maker of therapeutic melanoma vaccine.
(888) 637-4251, us.merial.com

Veterinary Cancer Society, referral list of veterinary oncologists. (619) 474-8929; PO Box 1763, Spring Valley, CA 91979
vetcancersociety.org

VETERINARIANS MENTIONED IN THIS ARTICLE

Kimberly Curtis, DVM. Handle With Care Home Veterinary Service
Chicago, IL. (312) 458-0969, hwchomevet.com

Jill Elliot, DVM. New York Holistic Vet, New York City
(212) 741-4000, nyholisticvet.com

Linda L. Faris, DVM, CVA
Acupuncture and Herbs for Pets,
Overland Park, KS. (913) 341-4372, westonvet.com

Gerald Post, DVM, ACVIM (Oncology)
Veterinary Oncology and Hematology Center,
Norwalk, CT. (203) 838-6626, oncovet.com



Three-year-old Jackie still has all of her toes, thanks to Neoplasene. Oral, injectable, and topical Neoplasene products are sold only to licensed veterinarians.

Recall Redux

Pet food recall seems to expand daily; what's a dog parent to do?

BY NANCY KERNS

Who could have imagined a month ago how the pet food recall could implode like this? This started in mid-March, when Menu Foods, a contract manufacturer of wet pet foods, announced it was recalling dozens of products containing wheat gluten, which was traced to a new source in China. A fortnight later, investigators identified a contaminant, melamine, a chemical used in plastics.

Once the source of the ingredient was known, investigators sought to locate every place the ingredient had ended up – and the recall expanded as more products made with the contaminated wheat gluten were found. As we went to press with the May issue, it seemed possible that the contamination of wheat gluten was limited to a sole shipment, and the number of places where the ingredient was used was finite – if not yet fully identified.

Just days later, that idea was disproved, as a number of dry pet foods, biscuits,

and treats were found to have been made with the Chinese wheat gluten. The recall expanded day by day.

Then, an even more frightening shift in the news occurred, as reports surfaced that both corn gluten and rice protein concentrate sourced from China had also been found to contain melamine.

The news was the number one topic of conversation at Petfood Forum, a trade association conference held in Chicago in mid-April. The experts seemed most shocked about the discovery of contaminated rice protein; this is considered a “quality” ingredient, expensive, and is not in wide use in mass market pet food like corn gluten or wheat gluten. Suddenly, even the makers of “super-premium” pet foods – who had no doubt been relieved previously that the problems seemed limited to a different segment of the market – were scrambling to trace and test their ingredient sources. The most frequent comment I heard at the conference was “it

What you can do . . .

- Contact the pet food company whose name is on the label of your dog's food (or see its website) to confirm its products have not been recalled.
- If you have lost confidence in commercial foods, study WDJ's series on home-prepared diets, starting with the April 2007 issue. Home-prepared diets are not difficult to formulate and prepare, but you **MUST** know a few vital points about canine nutritional requirements to nourish your dog.



Is there anything safe left for our pups to eat? We suggest staying in close contact with the maker of your dog's food – or switching to a home-prepared diet.

could happen to any one of us.”

Each day has seen dozens more foods added to the recall list. The latest news, as this issue is going to press, is that hundreds of foods that *don't* (according to their labels) contain any of the suspect ingredients are being recalled by Menu Foods (where they were manufactured) due to “cross contamination.”

Currently, there are thousands of recalled products – too many to list in our pages. Websites published by dog enthusiasts seem to offer the latest-breaking news of expanding recalls, including sites such as petfoodtracker.com, petconnection.com, and itchmo.com. If you don't have internet access, contact the manufacturer of each of your dog's foods and treats and ask if the products you have bought and fed to your pets have been recalled.

“An Open Secret” in China

On April 30, the *New York Times* broke the story wide open. Reporters for the paper

visited chemical plants in northeast China that make melamine from coal – and sell it to companies that manufacture plant-based proteins.

The *Times* reporters learned that the Xuzhou Anying Biologic Technology Development Company, one of the companies that American regulators named as having shipped melamine-tainted wheat gluten to the United States, had posted ads on industry websites in China, looking for sources of melamine to use in their products.

The reporters also spoke to two animal feed producers who told them that the use of melamine in plant-protein products is common in China. Inclusion of the product in small amounts “fools” the tests used to determine the protein content in the ingredient, making it appear that the protein levels are greater than they actually are; the higher the protein, the higher its value, and the higher its profits.

What are they good for?

Many dog owners, reeling from the daily bad news, are still trying to figure out what plant-based proteins are doing in carnivore food – especially in high-priced, presumably top-quality foods.

Plant proteins are mainly used to boost the protein content of some pet foods, though they may also contribute other functions. As discussed in “Pet Food Disaster,” May 2007, wheat gluten is widely used to thicken and “bind” the processed “chunks” or “cuts” of ground and mixed meat and grain material (known as “meat analogue”) used in wet “cuts and gravy” food products.

Corn gluten is frequently used to complete the desired amino acid profile of the finished product in an economical way. Wheat gluten costs about two to three times as much as corn gluten.

Rice protein concentrate is considered a higher-quality plant protein than wheat gluten or corn gluten, as it contains more of the amino acids needed by dogs and cats and is more digestible. It’s generally more expensive than wheat gluten, and even costs more than some animal proteins.

In low-cost foods, plant proteins (especially the extremely inexpensive corn gluten) are frequently used as a less-expensive alternative to a higher inclusion of animal proteins.

In higher-end foods, plant proteins are sometimes included when a manufacturer is seeking to provide a sole source of animal protein in the product, but the species

used cannot provide as much total protein as is desired in the formula. They may also be used when including more of the animal protein source would contribute too much of another nutrient, to potentially harmful levels.

This is often the case with lamb- or venison-based foods. Lamb and venison meal are lower-protein meals, with higher ash levels, and have a moderate risk of going rancid. Ash is present in these ingredients in proportion to the amount of bone included in the meal. Low-ash meals are available, but the price is very high. These meals are also very high in fat, which presents another problem for the formulator who is trying to increase the product’s protein without increasing the fat level too much.

This is why manufacturers will often supplement their lamb- or venison-based products with rice protein concentrate (which is higher in protein, lower in ash, and is a more stable product) to help achieve the desired protein levels while maintaining safe ash levels and decreasing the risk of rancidity.

Rice protein may also be used in foods that are formulated for animals who are allergic to or intolerant of animal proteins.

In our opinion, the inclusion of rice protein in a food is not a problem – unless the ingredient is contaminated with melamine! And the only way that the inclusion of melamine-contaminated rice protein in a food could be even worse news for a company is if “rice protein” wasn’t on the list of ingredients on a pet food label.

We’ve been telling people to read dog food labels since WDJ’s inception. But what’s a consumer to do if the label doesn’t list what’s actually in the food?

Inaccurate labels

When Natural Balance announced that it was recalling four of its foods, saying that the products contained rice protein concentrate found to contain melamine, our immediate response was “*What?*” The labels of the named products did not list rice protein as an ingredient. The company said in its April 17 press release that the ingredient had only recently been added to some production runs of the four products. The ingredient lists of the four foods were quickly changed on the company’s website to reflect the inclusion of rice protein, but of course the bags and cans of food already in stores (and people’s homes) did not.

Most pet food companies fiddle with

their ingredients from time to time, adding a bit of this or that, or removing ingredients that are difficult (or prohibitively expensive) to source or that pose processing challenges. But they are legally obligated to immediately update the package labels of the reformulated products to accurately reflect their contents.

There is a persistent myth that every pet food executive has heard (and many may have repeated), to the effect that federal labeling laws allow pet food makers a “grace period” of six months, in which they can change the ingredients of their foods without changing the label. *This is not true.*

Another shoe dropped when American Nutrition, the contract manufacturer that made Natural Balance’s wet foods and baked treats, announced a recall of 26 wet pet foods and two baked dog treats after learning that the rice protein it used in the foods was contaminated with melamine. Four foods not previously recalled by Natural Balance were on American Nutrition’s recall list.

Natural Balance issued a press release the same day, stating that American Nutrition had added rice protein to these four products without the consent or knowledge of Natural Balance. Canine Caviar, a company with two products on American Nutrition’s recall list, and Blue Buffalo (with nine products on the American Nutrition list), and others also have denied having any knowledge that rice protein was added to their foods.

American Nutrition has since published its own press release in response, saying (in part): “American Nutrition did not engage in any deliberate or intentionally wrongful conduct relative to the inclusion of rice protein in certain products it manufactures . . .

“American Nutrition is investigating the circumstances surrounding labeling, formulation, and related inter-company communications, but it is simply false to state that American Nutrition was engaged in any deliberately deceitful and/or unlawful conduct. Labeling responsibility is a cooperative effort between American Nutrition and its customers. American Nutrition believes, for their part, that they were compliant with all applicable label regulations. Additional information will be released as American Nutrition completes its own investigation and as they continue to cooperate fully with ongoing FDA and other governmental agency inquiries.”

I've toured American Nutrition's canery, and I'm aware that their computers and technicians generate "batch records" that note the amounts of each ingredient used as batches of food are mixed and cooked. Some pet food companies require copies of these records and actually review them. Usually, any deviations from the formula given to the co-packer must be approved by the pet food company whose name is on the label. In my opinion, it's a bit disingenuous for a pet food company to claim they didn't know what a co-packer was putting in their food.

But on the other hand, what are we to make of the "cross-contamination" claimed by Menu Foods?

We're frustrated, given that we've spent 10 years telling our subscribers to read product labels – and make purchasing decisions based on the ingredients that are on the labels. Now, it seems to be developing that "what's in the bag" (or can or pouch) is accurately described by the product labels only *sometimes*. The industry owes consumers some solutions; how can we ever trust that what's in the package is what the label says it is?

This incident opens another can of worms – or we should say, *reopens*. Law-

suits were only recently settled following a 2003 dog-killing recall involving food made by a contract manufacturer that evidently didn't contain what its labels said it contained. The co-packer pointed a finger at the formula provided by the pet food company, the company blamed the co-packer, and, thanks to the sealed nature of legal settlements, we'll never know who or what was truly at fault.

Bring on the revolution!

Problems frequently present an opportunity for growth or change, and the crisis in the pet food industry is no different.

Eager to win back the trust of concerned buyers, pet food companies are putting far more rigorous quality-control practices into immediate use. Some are "embedding" company staffers at contract manufacturing facilities. Some are seeking their own manufacturing facilities. I've heard from a number of pet food companies who are pledging to begin using U.S.-sourced ingredients only. Everyone has stepped up their procedures for sourcing and testing their ingredients.

While we're glad to hear about these planned improvements, we have to be a bit skeptical. How will the companies

involved prove to us that these things have been accomplished?

I'm thrilled to hear that thousands of people (including Oprah Winfrey!) have started feeding their dogs home-prepared diets. I hope that WDJ will help inform the people who stick to the practice over the long haul, to prevent health problems related to nutritional deficiencies, excesses, or imbalances caused by poorly designed diets or adherence to a single recipe.

Author Mary Straus has been slaving over our series of articles on the nuts and bolts of home-prepared diets for more than six months. The first one in a planned series of five or six articles appeared very fortuitously in our April issue; the third installment appears on page 3 of this issue.

In the long run, owners will have to determine where on the scale of fear and trust they stand. Guardians who have little faith in the pet food companies and much fear about commercial products will have little choice but to begin making home-prepared diets for their pets. Those on the other end of the scale – with little fear and lots of trust – will keep buying the products they and their dogs like. And many of us will probably take a middle path – at least until the recall headlines stop appearing daily. 🐾

LETTERS

Food Reviews Follow-up

Some reported as missing were present; other products DID disappear!

As a new subscriber to your journal, this is the first time I have received the issue that contains your recommended top quality dry food for dogs (February 2007). I was surprised that Solid Gold was not part of your list. I recently lost a 14-month-old Golden Retriever to cancer. Since that experience, food quality is my top priority for my dogs.

Marie Camirand
Montreal, Canada

Solid Gold's products did appear on our lists of "top dry foods" and "top wet foods" (March 2007). The dry products we highlighted were listed under their names: Hund-N-Flocken and Mmillennia.

I feed my three Border Collies Flint River Ranch food with an occasional treat of The Honest Kitchen and they are doing great. However, I noticed that FRR was not on your list this year. Can you tell me why?

Barbara Berg
Via e-mail

My sincere apologies for not explaining the omission of FRR's dry food this year. As far as I know, nothing has changed about the food's ingredients or manufacturing; it still meets our selection criteria. But every year I receive complaints from readers who are frustrated by the management style!

CONTINUED ON PAGE 24

A WORD TO OUR READERS: WHOLE DOG JOURNAL'S MAILING LIST POLICY

Like many other publishers, we make portions of our customer list available to carefully screened companies that offer products and services we believe you may enjoy. Indeed, in all likelihood, we were able to first reach you only because another company graciously permitted us access to its customer list. If, when we make our list available, you do not wish to receive these offers and/or information, please let us know by contacting us at:

Whole Dog Journal Opt-Out Program, 800 Connecticut Avenue, Norwalk, CT 06856-1631
Please include your current mailing label.

You don't have to dig for that lost issue!

Back issues of Whole Dog Journal are available

Order back issues
in one of
TWO
convenient ways:

2) Log onto
[whole-dog-journal.com/pub/
backissues.html](http://whole-dog-journal.com/pub/backissues.html)
to purchase articles and
immediately download
them to your computer

1) Mail this order form,
along with a check or
money order, to:

The Whole Dog Journal
P.O. Box 5656
Norwalk, CT 06856-5656

- 5/07 Pet Food Disaster • Home-Prepared Diets, Pt 2: Raw Diets with Meaty Bones • Common Mistakes in Positive Training • Another Yeast Species Implicated in Skin Problems
- 4/07 Home-Prepared Diets, Pt 1 • Fearful, Anxious, and Phobic Dogs • Lemon Balm • Toothbrushing • More Treatments for Injuries
- 3/07 Wet Food Review • Treatments for Osteoarthritis • Pre-Activity Acupressure • Teaching Good Leash Manners • Home Treatments for Sports Injuries
- 2/07 Dry Dog Foods Review • Teach Your Dog to Potty on Cue • Canine Candida • Count on Calendula • The Dog's Coat
- 1/07 Gear of the Year • Why We Advocate Positive Training Only • Acupressure for Anxiety • Dog Food Factories • Target Training • Keep Perspective of Your Dog's Progress
- 12/06 Positively Australia: How Training Differs Down Under • Diet and the Older Dog • Agility for Reactive Dogs • Pica and Coprophagia • Practice Management: You and Your Vet
- 11/06 Fix the Fetch • Shots Fired: Reducing Vaccination • How to Lead Your Pack • Hera's Housemate • Pro Antioxidants
- 10/06 Car Safety for Dogs • Anal Glands • Puppies • Dog Gone Dung • How to Teach Your Dog to Read
- 9/06 Stopping Urinary Incontinence • Hot Spots and Lick Granulomas • Acupressure for Health Maintenance • Pain & Pain Management
- 8/06 Probiotics • Men vs. Women Dog Trainers • Fat Dogs • Accelerated Wound Healing • Post-Operative Acupressure
- 7/06 Meds for Chronic Anxiety • Don't Do "Alpha Rolls" • Juliette de Bairacli Levy • Herbal Detoxification • Adrenal Gland
- 6/06 Stress Signals • Interview with Dr. Susan Wynn • Arnica • Teach Your Dog to Look at You • Willard Water • The Pancreas
- 5/06 Safe Pain Relief • What to Do If Your Dog Is a Bully • Giardia • Teaching Self-Control • The Canine Immune System
- 4/06 Commercial Raw, Frozen Diets • Active and Passive Submission • Treatment for Heartworm • Helping Shy Dogs • Canine Hospice

- 3/06 Preventing Canine Cancer • A Dependable Stay • Shape Training • Heartworm Prevention • Central Nervous System
- 2/06 Best Dry Foods • Target Training • Nonconventional Care for Canine Cancer • Electronic Training Collars
- 1/06 Best Wet Foods • Home Care for Canine Cancer • Old Dogs • Adoption Advice • (Body) Language Barrier
- 12/05 Fending Off the Flu • Teach a Perfect Recall • To Crop and Dock? • Conventional Cancer Care • Scary-Looking (But Safe) Play • Best Books on Positive Training
- 11/05 Preventing Great Escapes • Canine Cancer Crisis • Skin • Learn Canine Body Language • Defeating Distemper
- 10/05 Puppies and Bite Inhibition • Oral Enzyme Therapy Update • The "Gift" of Growling • Coconut Oil • Intuition • Joints

To find more past topics, see www.whole-dog-journal.com/search

NAME _____	
ADDRESS _____	
CITY _____	
STATE _____	ZIP _____
# _____ BACK ISSUES @ \$7.50 EA.	\$ _____
POSTAGE & HANDLING	\$ 2.00
TOTAL AMOUNT ENCLOSED	\$ _____

LETTERS CONTINUED FROM PAGE 22

business structure of this multi-level marketing company. Consumers either get no response, or a poor response, when they try to reach the “home office” – the people responsible for formulating and making the food. Consumers with questions or concerns about the food are encouraged, instead, to bring their questions to an independent distributor of the food near them. Often, these independent agents are unable to answer consumers’ questions about the food – and are even sometimes unable to find out the information from the “senior distributor” above them, much less the company representatives.

Recent events have demonstrated how important it is to be able to quickly and easily contact the maker of a dog food, to report problems, have confidence that the problems will be recorded and considered, and to receive quick and reliable answers to urgent questions. It’s been our experience, and that of many of our readers, that the folks in FRR’s corporate office discourage interaction with consumers.

Given this persistent complaint, I decided to stop listing the products; it was no reflection whatsoever on the products themselves.

A phone number, please, for the company that sells Bioflow magnetic therapy products for dogs (as mentioned in “Help Rover Get Over It,” April 2007)? It’s incredibly annoying for those of us who don’t have a computer (and don’t plan to get one!) when only a website or e-mail address is given for a company or person.

Via e-mail

I’m very sorry about that; we usually take pains to include a phone number, not just a website address, for the companies whose products we recommend. The company can be reached (in the United Kingdom) at 011-44-155-939-5477. The address is Magnetise, Bwlch Bychan Farmhouse, Brynteg, Ceredigion, SA40 9UY.

– Nancy Kerns

RESOURCES

TRAINING AND INSTRUCTION

Pat Miller, CPDT, Peaceable Paws Dog and Puppy Training, Hagerstown, MD. Train with modern, dog-friendly positive methods. Group and private training, Rally, behavior modification, workshops, intern and apprentice programs. (301) 582-9420; peaceablepaws.com

The Association of Pet Dog Trainers (APDT) (800) 738-3647; apdt.com.

BOOKS

WDJ Training Editor Pat Miller is author of two books: *The Power of Positive Dog Training* and *Positive Perspectives: Love Your Dog, Train Your Dog*. Both books are available from DogWise, (800) 776-2665 or dogwise.com

The Encyclopedia of Natural Pet Care and *Natural Remedies for Dogs and Cats*, by WDJ contributor CJ Puotinen, are available from DogWise, (800) 776-2665 or dogwise.com. Puotinen is also author of several books about human health including *Natural Relief from Aches and Pains*, available from your favorite bookseller.

WHAT’S AHEAD

Keeping It Real

The fourth installment of our series on home-prepared diets is a reality check. We’ll feature actual dog owners who will share details about what they feed and how they prepare it.

What a Dog’s Gotta Chew

Why dogs chew on things, and how to properly manage this behavior to your advantage.

Cool Customers

A review of the most effective coats and vests that can chill out your hot dog this summer.

Go to the Top of Your Class

How to get the most out of a dog or puppy training class.

Truly Essential Fatty Acids

A guide to the best sources of these nutrients, which can vastly improve the condition of your dog’s skin and coat.

The Word On Her Lipomas

*Many dogs, especially older dogs, develop fatty tumors. Most of the time, they cause no harm. Here’s how to know when you **should** deal with them, and how.*