The Whole VOLUME 8 NUMBER 5

Dog Journal

A monthly guide to natural dog care and training

May 2005

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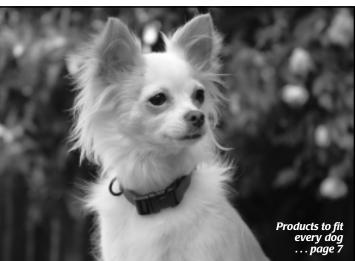
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EDITOR'S NOTE

Fan Favorites

We're looking for a few good dog products.

BY NANCY KERNS

ow often does it happen that you buy a product for your dog and are completely thrilled with the product's performance? Despite the number and variety of toys, training aids, beds, and other dog-care items in the pet product marketplace, it's rare to find something that works well in every way. We're always on the lookout for products that work well, look good, wash easily, and resist wear. If they are available at a reasonable price, great - although we have been known to spend a small fortune on products that meet all the above criteria and have become indispensable to us.

An example? In late 1999 we ordered a dog bed from PC Panache for a review that we published in January 2000. It was the office dog's bed for more than three years, and has served as a "guest" bed for two more. Despite frequent washing of the cover, and minor nibbling by a variety of guests, it succumbed only this year to the persistent digging and then joyful tearing of a frequent guest, an Australian Shepherd who, apparently, didn't get walked enough in his week-long visit with us. Although the original purchase price was over \$100, the bed paid for itself many times over. (If you want one, call 610-689-3829 or see pcpanache.com.)

If you and your dog enjoy a product like this, we'd love to hear about it. We'd like this year's installment of "Gear of the Year," published in our December issue, to feature some of your top picks - after we've had time to order and test them ourselves! You can mail or fax your suggestions to the editorial office (see above right), or e-mail them to WDJ Top Products@aol.com. Please include some clues about how we can find the product: its

manufacturer's name and location, for example, and/or the name and location of the place you found it.

SPEAKING OF QUALITY ...

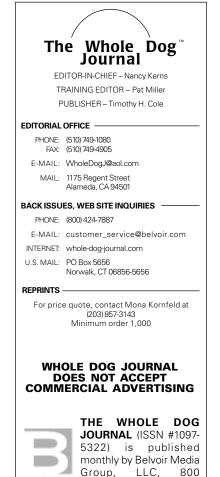
I know I've mentioned BARK before, but I can't say enough good things about the quarterly literary magazine for people who love dogs. [Full disclosure: I've contributed a few small articles to the magazine over the years, and because of this, I am listed among its contributing editors.] Claudia Kawczynska and Cameron Woo started the magazine in 1997 to help organize dog owners near Berkeley, California, to create of off-leash dog parks in the area, but BARK quickly became a whole lot more.

Today, a national magazine printed in full color, BARK is frequently and accurately described as "the New Yorker for dog owners." It features dog-related memoirs and fiction from authors such as Caroline Knapp, Alice Walker, and Pam Houston - and some of the best is collected in an award-winning book, Dog Is My Co-Pilot. (About the book: You'll find yourself laughing out loud a dozen times, and teary-eved another half-dozen. It's a great collection.) BARK also features top-shelf reporting on anything canine - health, behavior, training. The work of artists who produce extraordinary work with dogs as their inspiration frequently appears as well.

BARK contains advertising, but Woo and Kawczynska are incredibly picky about which ads they will accept; you won't see an ad for shock collars, for example, or health-related products that make exaggerated or unproven claims. For more information, see thebark.com or call (877) 227-5639.



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.



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NUTRITION

When to Say No to Low-Protein

Only dogs whose kidney failure is advanced need very low-protein diets.

BY CJ PUOTINEN

very day, thousands of dogs are diagnosed with kidney disease. The first suggestion most conventional veterinarians make is to switch from whatever the dog has been eating to a low-protein "kidney diet" food. Clients are sent home with bags or cans of "prescription" food and warned not to feed high-protein foods or treats of any kind.

Most dogs, even chow hounds, approach their new, low-protein food with suspicion, since these diets are generally much less palatable than foods that contain more animal protein. Many refuse to eat. Conventional veterinarians are used to this response and tell their clients to stick to the new food for their dogs' own good. "Your old food is too high in protein and will actually speed kidney failure," they warn. "Keep giving him the prescription food. He'll come around when he gets hungry enough."

Eventually most CRF patients do accept their new food, though without much gusto or enthusiasm. Worse, despite their food's low protein levels, the dogs' slow deterioration continues.

Many look back, after their dogs have died, and wonder whether they did the right thing. Now a new approach to feeding dogs with kidney disease offers a different scenario – one that's more likely to keep CRF dogs, and their human companions, happy.

A paradigm shift

It's a fact of life that not all medical discoveries and "breakthroughs" in disease treatment prove to be as promising as they seemed at first. Adopted on the basis of a few small, encouraging studies, some strategies are found later to cause mixed or even adverse results.

This is definitely the case with the currently predominant treatment strategy of giving dogs with CRF a low-protein diet. Newer research has radically changed and fine-tuned the dietary recommendations for canine CRF patients. Those using the latest, recommendations to feed their CRF dogs a therapeutic home-prepared diet report excellent results. Best of all, most dogs love the combination of high-quality protein and freshly prepared ingredients.

About CRF

Chronic renal failure affects male and female dogs of all breeds and all ages. Its underlying cause may be hereditary or related to inflammation, tick disease, progressive degeneration, damage following acute renal failure, or unknown causes.



- Improve your CRF dog's diet with better sources of protein while limiting sources of phosphorus.
- Encourage your dog to drink more fluids. Provide clean, fresh filtered or low-mineral bottled water.
- Give high-quality supplements that have been shown to help with kidney disease, including CoQ10, fish body oil (not fish liver oil), and glandular supplements.

Acute renal failure may be triggered by a trauma injury, exposure to poisons like antifreeze or rat poison, or damage caused by medications, bacterial infections (such as leptospirosis), fungal infections, or dehydration.

Breeds at Increased Risk

Hereditary renal failure has been documented in the Basenji, Beagle, Bull Terrier, Cairn Terrier, Chow, Cocker Spaniel, Doberman Pinscher, German Shepherd, Lhasa Apso, Miniature Schnauzer, Norwegian Elkhound, Rottweiler, Samoyed, Chinese Shar-Pei, Shih Tzu, Soft-coated Wheaten Terrier, and Standard Poodle.

Because these breeds may be at higher risk for kidney disease, it is important when purchasing puppies to ask for proof that the breeding stock has been screened for renal disease. Monitor dogs of these breeds with blood work and urinalyses, and pay attention to water intake so you can react quickly if changes occur.



Understanding Phosphorus

Feeding a low-phosphorus diet has been shown to benefit dogs with kidney disease. Bones are very high in phosphorus and should be eliminated or fed in very small amounts. When formulating a diet for a CRF patient, never add bone meal, but instead use a calcium source that does not include phosphorus, such as ground eggshells or calcium carbonate.

Other foods high in phosphorus include dairy products (especially cheese), fish with bones, organ meats, and egg yolks. These are nutritionally dense foods, so they should not be eliminated from the diet. Instead, feed them in reduced amounts in combination with low-phosphorus grains and vegetables. Low-fat meat is higher in phosphorus than fatty cuts, so unless your dog has a problem with fat, feed higher-fat meats and whole-milk dairy. Always add calcium, which acts as a phosphorus binder, to all meals. You can use ½ teaspoon ground eggshell, or around 1 gram (1,000 mg) calcium, per pound of food.

On her DogAware Web site, Mary Straus lists recommended phosphorus levels for dogs of different weights in different stages of kidney disease along with nutritional information, including calories and phosphorus levels, of dozens of common foods. To help caregivers plan their dogs' menus around phosphorus levels while providing enough calories to prevent weight loss, a common problem in CRF dogs, Straus color-codes these foods. ■ Code Red: Feed in small amounts. These include low-fat meats such as ground turkey, lean ground beef, or skinless chicken breast; organ meats, such as beef heart, chicken liver, beef liver, or beef kidney; canned fish, such as jack mackerel, pink salmon, or sardines in tomato sauce or water (not oil); high-phosphorus grains such as oatmeal; dairy products such as cottage cheese, whole-milk yogurt, whole-milk mozzarella cheese, cheddar cheese, or whole eggs and egg yolks.

Raw meaty bones, including chicken parts (backs, necks, wings, and legs) and turkey necks should be fed in limited amounts, if at all.

■ Code Blue: Feed in moderate amounts. Higher-fat meats such as dark-meat chicken and skin, 20-percent-fat ground beef, pork, lamb, and liverwurst; green tripe; winter squash such as acorn or butternut; and whole grains such as brown rice, millet, and whole-wheat bread.

■ Code Green: Okay to feed in large amounts. Egg whites, yams or sweet potatoes, white potatoes, cereals such as Cream of Wheat, Cream of Rice, or Malt-o-Meal, glutinous (sticky) rice, white rice, barley, and white bread. Grains should be cooked, and boiling vegetables may reduce their phosphorus levels.

Many animals born with poorly constructed or poorly functioning kidneys succumb to kidney failure at a young age. Most cases of chronic renal failure are seen in dogs age seven or older. Chronic nephritis, a common diagnosis in CRF patients, involves low-grade, long-term inflammation of kidney tissue that causes permanent damage to delicate renal tissue.

Conventional veterinary medicine considers all forms of kidney disease to be irreversible, progressive, and eventually fatal. But many holistic veterinarians disagree, saying that the progress of chronic renal failure can be interrupted or slowed with improved nutrition and holistic support.

"Since I turned to a natural approach to wellness," says Florida veterinarian Russell Swift, DVM, "I have seen many dogs outlive their death sentence by years."

Like many holistic vets, Dr. Swift blames a toxic lifestyle for causing many cases of CRF. "I believe the major reasons for kidney failure are poor-quality nutrition and exposure to toxins. Processed foods are a major contributor to kidney disease because they combine poor-quality ingredients with harmful additives or residues, and that leads to chronic illness. The inadequate and improper protein sources in processed foods and the low moisture content of dry foods are two major kidney stressors.

"When dogs are treated with prescription drugs for the problems that often accompany commercial diets, they are given nonsteroidal anti-inflammatories (NSAIDs), antibiotics, and other medications that are damaging to the kidneys. I also question the use of food additives and preservatives and the use of fluoride in drinking water, and don't forget environmental toxins like lawn chemicals and other pesticides, including those that we use around ourselves and our companion animals. It's a wonder more dogs don't develop kidney problems."

The protein debate

As soon as they diagnose kidney disease, most American veterinarians prescribe a low-protein diet. They believe that protein harms the kidneys and that reducing protein consumption slows the progress of kidney degeneration. This is because early research on rats was assumed to be true for dogs, and excess protein causes problems for rats. A number of pet food manufacturers sell low-protein prescription diets for dogs with chronic renal failure, and those who prepare their own food at home are warned against feeding meat, poultry, and other foods that are high in protein.

"Those recommendations are based on a myth," says Wendy Volhard, author of Holistic Guide for a Healthy Dog. "In fact, the whole theory of low-protein diets for dogs with kidney disease was blown apart in 1975 by David Kronfeld, PhD, who was at the time a veterinary researcher at the University of Pennsylvania. His concept was not to feed less protein but rather to feed higher-quality protein.

"The low-protein myth is like an oldwive's tale, something based on ignorance that just won't die. Yes, inferior-quality protein can harm a dog's kidneys, but the solution isn't to continue with inferiorquality ingredients and feed less of them. The solution is to *improve* the quality of ingredients and in that way provide what the dog needs for good health."

Studies disproving the prevalent lowprotein prescription have been widely published in veterinary journals and textbooks. But it is moving into the mainstream very slowly.

"Most vets who did not graduate from college in the last few years (and some of those as well) are still unaware of or dismiss the newer studies that show low-protein diets neither slow the progression of kidney disease nor prolong life," says Mary Straus, a lifetime dog lover from the San Francisco Bay area who researches health and nutrition issues.

"Too many dogs are forced to eat Pre-

scription Diet k/d[®] or similar low-protein prescription foods," says Straus. "These can actually cause harm. When protein levels are very low, the body will cannibalize itself to get the protein it needs. This creates *more* waste products than if you feed the proper amount of high-quality protein in the first place. Also, k/d is not very palatable, and many dogs with kidney disease will eat only enough of it to survive, or stop eating entirely if that is all they are offered."

Older dogs actually require a *higher* level of protein to maintain their body stores of protein than do younger adult dogs, says veterinary nutritionist Patricia Schenck, DVM, PhD, of Michigan State University's Center for Veterinary Medicine. In an article published in *Veterinary Nutritionist*, Dr. Schenck wrote, "Reducing dietary protein in older pets may have adverse effects. As pets age, their ability to utilize nutrients decreases. The only time dietary protein restriction is appropriate in renal failure is when the disease has become severe."

Healthy geriatric dogs require about 50 percent more protein than young adults, say canine health writers Susan Thorpe-Vargas, PhD, and John C. Cargill, MA. Depending on the quality of the protein, they say, it should make up 20 to 30 percent of total calories ingested. "Protein restriction can result in impaired wound healing, diminished immune function, and lowered enzyme activities and cellular turnover. Dogs with impaired renal function do better with dietary phosphorus restrictions."

The new action plan

Mary Straus's dog Nattie was a healthy, athletic Chinese Shar-Pei who had no trouble keeping up with young dogs even at 10 and 11 years of age. She ate kibble and received annual vaccinations until 1997, when Straus learned about the health benefits of raw diets and the harm that can be caused by repeated vaccinations. Nattie was 10 years old when she was converted to a raw diet and stopped receiving vaccinations. Four years later, at age 14, Nattie was diagnosed with kidney disease. After much research, Straus put the newest diet plan into place for Nattie.

"I modified her diet to reduce its phosphorus but kept her protein levels high," says Straus. "Her diet was around 37 percent protein on a dry matter basis, and she thrived. Her kidney numbers actually improved for two years, and when she died at age 16, her illness had nothing to do with kidney disease. "People need to know this information, as well as how to formulate a homemade diet or what foods to add if they are going to feed k/d or one of the other low-protein commercial diets for kidney disease."

Dietary goals

When developing a diet for dogs with kidney failure, the recommendations from leading experts are to feed

- moderate to high amounts of fat,
- moderate amounts of high-quality protein,
- low amounts of phosphorus,
- moderate amounts of low-phosphorus carbohydrates,
- and plenty of water, juices, broth, and other liquids.

Although guidelines vary, a sensible goal is a diet whose total calories come 1/3 from fat, 1/3 from protein, and 1/3 from carbohydrates.

Fat provides calories and energy, and most dogs have an easy time digesting it. Good sources of saturated fat include fatty meats, butter, whole-milk yogurt, egg yolks, and coconut oil.

Polyunsaturated vegetable oils, such as canola, corn, soy, safflower, sunflower, and flax seed oil, are not recommended for CRF patients. Neither is cod liver oil, because of its high vitamin D content, which failing kidneys have difficulty processing. But fish oil (fish *body* oil, not fish *liver* oil) has been shown to help dogs with CRF.

When adding fats and oils to the homeprepared diet, start with small amounts and increase quantities gradually. Too much too soon can lead to diarrhea. Dogs prone to pancreatitis should be carefully monitored.

What are the best sources of protein? Most experts consider eggs to contain the highest-quality protein, but their yolks contain moderate amounts of phosphorous. One strategy for feeding eggs to CRF dogs is to feed one or two egg whites for every whole egg. Calcium is a phosphorus binder, so add small amounts of finely ground eggshell to each meal (½ teaspoon per pound of food) to help reduce the amount of phosphorus absorbed by the body.

Other foods high in phosphorous include bones, fish with bones, cheese, and organ meats. "Bones are so high in phosphorus," says Straus. "that I would avoid them or feed them in small amounts, such as one-third the normal quantity, even with early stage CRF. Like egg yolks, organ meats such as kidney and liver contain many nutrients that are important for canine health and should be included, but in moderate amounts."

Further diet tips

Recently, green tripe, a food traditionally fed in Europe, has become a staple for many American dogs, including CRF patients. Green tripe is the raw, unprocessed stomachs of cud-chewing animals like cows, goats, or sheep. Supermarket tripe is white because it has been bleached and deodorized, which destroys fragile nutrients. Green tripe contains easily digestible protein, beneficial bacteria, abundant enzymes, and relatively low phosphorus levels.

Recommended Supplements for CRF Patients

Salmon oil or other fish body oil (not cod liver oil). Feed up to 1 gram (1,000 mg) per 10 pounds of body weight daily.

Coenzyme Q10. In a recent human study, kidney disease patients improved on a dose of 60 mg CoQ10 three times daily. Adjust this for your dog's weight by using 15 mg per 25 pounds of body weight, three times daily.

Vitamin E, 50 IU daily per 25 pounds of body weight. Also give **vitamin B-complex** and **moderate amounts of vitamin C,** around 500 mg for a 50-pound dog. Avoid multivitamin/ mineral products that contain phosphorus or vitamin D. Buffered or ascorbate forms of vitamin C may be easier on the stomach.

Glandular supplements that support the kidneys are often recommended by holistic veterinarians. Canine Renal Support from Standard Process is available from veterinarians, licensed health care practitioners, and some online sources.

Herbal supplements. Traditional kidney tonics include dandelion leaf and root, couch grass, and marshmallow. Look for teas and tinctures that contain these and other gentle, supportive ingredients, or consult *Herbs for Pets*, by Mary Wulff-Tilford and Gregory Tilford (BowTie Press).

Tripe smells awful to humans but sublime to dogs, including CRF patients who have otherwise lost interest in food. Thanks to increasing demand, frozen green tripe is available from mail order sources and some local distributors of raw frozen foods.

If you choose to feed a prescription dry or canned food rather than a home-prepared diet, add fresh protein foods, either raw or cooked, such as meat, eggs, egg whites, and tripe, especially in the early stages of the disease.

If you feed a diet based on raw meaty bones, substantially reduce the amount of bone. If the diet calls for bone meal, like the Natural Diet developed by Wendy Volhard, follow her advice to switch from lean to fatty meats and substitute cal-

cium carbonate for the bone meal to reduce phosphorus levels.

While dogs are not designed to consume grains or starchy vegetables, most CRF diets include up to 50 percent carbohydrates in order to provide calories and nutrients while keeping phosphorus levels low. Steaming or boiling vegetables reduces phosphorus levels if you discard the cooking water. Alternatively, puree or juice them to improve assimilation. Note, however, that dogs with arthritis may be sensitive to nightshade plants, which include white potatoes, peppers, eggplant, and tomatoes.

Whole wheat, oatmeal, brown rice, millet, and other whole grains are moderately high in phosphorus and should not be fed often or in large amounts. White rice is low in phosphorus, and glutinous or sticky rice is the lowest-phosphorus grain. To help make grains more digestible (as described in "It's All in How You Make It," WDJ March 2001), soak them overnight to remove enzyme-suppressors and naturally occurring toxins.

"I have had good luck with Malt-o-Meal, which is low in phosphorus," says Straus. "You have to be careful about feeding vegetables to dogs with kidney disease. I recommend using white potatoes and yams because they provide a lot of calories without adding much phosphorus, unlike many of the low-cal veggies."

Dogs with high blood pressure, which can be related to kidney disease, may need reduced salt in their food. Home-prepared diets are naturally low in salt, but cottage cheese is high in salt, canned fish can be



Pay attention to your dog's water consumption; it's an important clue as the state of his kidneys. Make sure he's got plenty of fresh, pure water at all times.

rinsed to remove salt, and processed foods should be checked for their sodium content.

Because dehydration creates serious problems for dogs with kidney disease, it's important to provide abundant water. "Make sure fresh water is always available," suggests Straus, "even if excess drinking causes your dog to become incontinent. If your dog already drinks a lot of water, ask your vet about giving subcutaneous fluids to help the dog stay hydrated." Hard water contains minerals that are best avoided, so use filtered or low-mineral bottled water.

Dogs with kidney disease can lose interest in food, so look for foods and flavors that can revitalize a flagging appetite. "It's important for these dogs to eat something," says Straus, "even if it's not one of the recommended foods. Try offering your dog's food at different temperatures, experiment with raw versus cooked, and offer multiple small meals rather than just one or two large ones. My Nattie wouldn't eat raw eggs, but she loved eggs scrambled with a bit of cheese. The cheese wasn't the best thing for her, but it got her to eat."

Green tripe can be added to food as a flavor enhancer, as can Seacure, a very fishy-smelling powder sold as a protein supplement. "If you feed a commercial food like k/d and your dog won't eat it, find something else, preferably a homemade diet that provides

high-quality protein while controlling the amount of phosphorus," she says.

Plus, she adds, most dogs love fresh food. "The higher moisture levels in fresh foods help protect their kidneys, and they feel better and enjoy life more."

In the next issue: What If It Isn't Chronic Renal Failure? Avoiding Misdiagnosis.

CJ Puotinen is the author of *The Encyclopedia of Natural Pet Care* (Keats/McGraw-Hill) and *Natural Remedies for Dogs and Cats* (Gramercy/Random House). See "Resources," page 24 for information.

Resources

K9KidneyDiet online forum: http://groups.yahoo.com/group/K9KidneyDiet

Mary Straus, dogaware.com (click on "kidney disease") and K9Nutrition online forum http://groups.yahoo.com/group/K9Nutrition

Russell Swift, DVM, Tamarac, FL. (461) 391-5615, therightremedy.com

Holistic Guide for a Healthy Dog, by Wendy Volhard (Howell Book House, 2nd Edition, 2000)

See excerpts from reports published by Patricia Schenck, DVM, PhD, Susan Thorpe-Vargas, PhD., and John C. Cargill, MA, at dogaware.com; click on "kidney disease"

ADDITIONAL SUPPLEMENTS

The following are mentioned as flavor enhancers – minor recommendations that may prove helpful to some dogs

Green tripe: Sources include GreenTripe.com, San Juan Bautista, CA. (831) 601-1004, greentripe.com; and A Place for Paws, Columbiana, OH, (800) 354-4216, aplaceforpaws.com

Seacure: Manufactured by Proper Nutrition, Inc., Reading, PA. (800) 247-5656 or propernutrition.com. For more information about Seacure, see "Securing Seacure," WDJ April 2003

The Collar of Money

The most useful, most attractive "regular" collars we've ever seen.

BY NANCY KERNS

ogs have become *very* popular in the last decade or so, and with their increasingly higher-profile place in our society, there has been a boom in businesses that create unique and useful dog-care products. Collars might just be the most ubiquitous.

There's an adage: "Build a better mousetrap and the world will beat a path to your door." We think it ought to be *dog collar*. There are now hundreds of special-purpose collars on the market: products that purport to prevent pulling, safety collars that release under tension, light-up or reflective collars for walking in the dark, collars with builtin retractable leashes or poop-bag dispensers . . . the list is almost endless.

Equally endless is the selection of plain old "regular" collars, products that provide only the most basic services: offer a place to secure your dog's ID and your leash. It's astonishing how much variety can be brought to the most basic product. Even in the "regular" collar category, there are products that emphasize certain abilities: increased strength, for example, or comfort, light weight, smoothness on the coat, or ease of use. Or, of course, fashion. Collars that look cool while working well – what more can you ask for?

Selection criteria

Sometimes when we do a review of a certain type of product, there are only a few to examine, so we can try them all and tell you which ones performed well and which ones you shouldn't waste your money on. Since this category is so huge – even with specialty collars excluded – *all* of the products we are going to tell you about in this review qualify as "top picks," earning our four-paw rating (see rating system, below). We won't bother telling you about the many products that failed our in-store examination, or the catalog-sourced products that disappointed us. We'd rather use the space on products we really like.

What, exactly, do we like in a collar? To start, we look for **top-quality materials** – leather that is soft and supple, evenly dyed,



WHAT YOU CAN DO . . .

- ALWAYS keep a collar and ID tags on your dog.
- Order extra ID tags so each of the collars your dog wears has your contact numbers on it.
- There are special-purpose collars available for addressing any issue you and your dog may have – increased safety, strength, comfort, etc. Look until you find the perfect one.

neither greasy nor dry; nylon that feels smooth and pliable; and buckles and snaps that open and close easily and securely. Next, we examine the **quality of the workmanship.** We want to see tight, even stitching, and nylon ends that are smoothly heat-sealed to prevent fraying. The collar should be constructed in such a way that it lies nicely around the dog's neck, without pressing or bending inward in a way that could rub or otherwise cause the dog to be uncomfortable.



Small dogs often get shortchanged by collar manufacturers; not all the collars we really like are available in tiny sizes. The reviews of our selected products (starting on the next page) note the smallest size offered in each collar.

 WHOLE DOG JOURNAL'S

 0-4 PAWS PRODUCT RATING:

 As good as it gets. We enjoy & approve of the product.

 A good product, but with one or two significant flaws.

 The product has Some value, but it also has some serious flaws; buyer beware.

 We are including The product only because of its potential for improvement.

 The product has no redeeming value – at least, none that wdj can appreciate.

Next, we look for products that are **easy to use.** Sometimes this is a result of good hardware – for example, when the maker utilizes a D-ring that is especially large, making it easy to clip a leash onto it. In other cases, the ease-of-use is a result of good workmanship, such as when the holes for a buckle are punched a little on the large side, to make it easier to align the tongue of the buckle with just the right hole.

Last, but not least, we look for products that offer a lot more than the usual amount of **attractiveness.** Hip? Elegant? Showy? Any and all qualify.

Okay, let's get on with it. In no particular order, here are the collars currently on the market that we like best.



Wow! Hemp has to be the softest, most comfortable, but strong fabric we've ever felt. Planet Dog has put the material to great use in its flat collars, available in an unlined style or lined with a soft fleece material.

As we went to press, we learned that Planet Dog recently discontinued its models with the belt-type buckles (shown in center and left, above) in favor of metal siderelease style buckles. (The smallest size has plastic buckles – lighter for little dogs.) We liked both types, but the side-release models *are* more adjustable, so it's fine with us.

We were originally attracted to the fleece-lined collar for dogs we know with very thin coats; leather, nylon, and even cotton can rub bare spots on some of these dogs' necks and throats. The fleece does a nice job of keeping the coat intact, but we found that the unlined hemp was easy on these dogs' coats, too. We also liked the ample size of the D-rings for attaching leashes.

Planet Dog offers these collars in just a few groovy colors: apple-green, orange, and purple. Matching leashes are available.

The company literature claimed that hemp takes washing well, and just gets better with time. That's been our experience so far.



There are dozens of nylon collars on the market, but we don't know any company besides White Pine that uses this very soft, silky nylon for its collars (and leashes, long lines, and harnesses). It's an absolute pleasure in the hand, making the order of a matching leash a necessity! The material is colorfast and can be washed frequently without stiffening. The collars come in a variety of widths, from 3/8" (which is very lightweight, for tiny dogs) to an attractive 1" for big dogs. They are also available in a wide variety of bright, pretty colors.

The Soft Web collars are available in two styles: the "Soft Snap," which has a plastic side-release buckle (shown in the center of the photo above), or the "Soft Slip" (the outer collar in the photo), which is a limited-slip collar. The latter type of collar tightens slightly with leash tension to prevent a dog from slipping out of it, but if properly fit, they cannot choke a dog). The D-rings on the collars are black stainless steel. Best of all is the reasonable price.



These are the second-most expensive collars we've featured here, but also the most attractive, in our opinion – colorful, unique, well-made, and perfectly functional. The black-and-white photo above does the vivid color of the collar a grave injustice.

Wendel Wirth, proprietor of "a tail we could wag" (yes, it's spelled with all small letters), made the first "Tail Waggin' Collar" for her own dog out of an old leash and a worn Guatemalan sash. She and her dog received so many compliments about the collar, that she began sewing a limited number of the collars and selling them in a local bar and grill. A thriving business was born.

Wirth now offers collars (and matching leashes) in a number of gorgeous patterns, all of which are traditional Mayan designs, woven for the company by native Mayans in Guatemala. The woven cotton is then stitched to a strong, soft nylon backing. The hardware used includes *large* solid brass Drings and plastic side-release buckles that are slightly curved, for the dog's comfort. Little touches like these really improve the performance of a product, and we just love these collars.



This flat collar has a couple of cool features that *almost* make it too "tricked out" to include in this "regular" collar review.

It gets its name by virtue of an elegantly simple (and probably soon-to-be-copied) feature: a plastic "keeper" that keeps a large D-ring conveniently positioned at the back of the dog's neck, where you can quickly and easily snap the leash on and off. Plus, with the leash fastened at the back of the dog's neck, he's less likely to step over the leash when you're not paying attention. Too cool! An extra-heavy side-release buckle also serves as "ballast," helping to hold the collar in the "right" position. This might prove a bit too clunky for a very small dog, but then again, the smallest size can be adjusted down to only nine inches, so perhaps this is self-limiting.

Another innovative feature (shared by some of Ruff Wear's other collars) is a separate plastic loop, sewn onto the nylon fabric, for your dog's ID tags. No more accidently clipping the leash onto the flimsy little ring the ID tags hang on!

The Top Rope Collar is available in four solid colors and four cool patterns.



Here's another basic collar from Ruff Wear with some neat "extra" features.

The Knot-a-Collar has a minimal appearance that some owners will like; it looks like just a bit of light, mountain-climbingtype rope tied around the dog's neck. But as the name suggests, the knots that the collar is tied with are what makes it special. You slip the buckleless collar over the dog's head; it takes two hands pulling on the collar a certain way to adjust its fit. When a leash is attached properly to the stainless steel ring on the collar, no amount of tension will make the collar tighten. But if the dog snags the collar on something, it will slide loose enough to free him.

Ruff Wear has again included a separate ring on which the dog's ID tags can be hung, so you don't accidently snap the leash onto the flimsy ID tag ring.

The Knot-a-Collar is available in three colors and two widely adjustable sizes.



Okay, we know: That's a crazy price for a dog collar. These collars are for dogs who belong to completely dog-crazy people.

All of Mrs. Bones collars are made of washable fabric, and use solid brass hardware, or in some designs, plastic side-release buckles. That's the only generalization we'll make about these collars, because the company offers a head-spinning array of deluxe fabrics and patterns to choose from. The tiny ones start at 5/8" wide; the giant collars are up to 2" wide. The fabrics include velvet, brocade, tartan, and silk-lined models.



Mrs. Bones offers a wealth of fabric choices.

All of Mrs. Bones collars are available in three different basic forms. The first (shown in the center of the photo, below left) has a standard plastic side-release buckle (the nice, curved kind). The second (on the right in the same photo) is what Mrs. Bones calls a "sighthound" style – a "limited slip" design that slides over the dog's head and then is adjusted to fit. The D-ring for leash attachment is sewn into a separate loop of fabric that tightens to a limited degree with tension on the leash.

The final style is a "single loop" design (left in photo) that also passes over a dog's head and is adjusted with a slider to fit. The latter style is particularly well-suited for tiny dogs or dogs with delicate skin or coats, since there is no buckle to rub the coat or irritate the dog's neck.

Simply put, Mrs. Bones has the biggest offering of really gorgeous and unique designs available; there are several hundred styles and sizes to choose from, and the collars are custom-made for your dog. If it's important to you to have the only collar of a particular kind in your whole town, Mrs. Bones is the place to shop.



This is a very simple collar that makes our list by virtue of the unique material it is made of: BioThane, a patented material made of a polypropylene webbing that is coated with urethane.

Used increasingly in horse tack, BioThane is an incredibly strong, flexible material, and available in a wide variety of vivid colors (and even a glow-in-the-dark option for an extra \$2, but we didn't test that one). BioThane is also waterproof, *if* the material is heat-sealed at every spot where it is cut or punched. We couldn't detect evidence of heat-sealing in the products we tested, but even if OllyDog doesn't do it, it's a simple thing to do yourself, with a fire-heated blade or screwdriver.

These collars are lightweight, smooth, and so flexible, they must be comfortable. They can be ordered in one of two widths: 3/4" or 1". The hardware appears to be high-quality stainless steel. Best of all, the material can be kept clean and odor-free with the wipe of a sponge.

What About Shopping in Stores?

While all of the products described above are available directly from their manufacturers, most of them are also available, to varying degrees, in select pet supply stores. If you (understandably) would like to see and feel the collars before you buy one, contact the maker and ask whether its

> products are available in a store near you. Even better, share your interest in the collars with the owner or manager of your favorite local canine boutique; maybe she will take an interest, too, and start to carry the products that you like the best. Of course, this will undoubtedly make it even more difficult to choose which collar you like most for your dog...

It may be difficult to choose just one for your dog to wear at a time.

TRAINING

Crate Difficulties

Helping more dogs find contentment in the close quarters of a crate.

BY PAT MILLER

he topic turned to crating on one of my trainer e-mail lists recently. I was horrified to read that some shelters and rescue groups refuse to adopt to prospective owners who intend to use a crate with their dogs. What madness is this?

I first discovered crates some 30 years ago, when they were relatively new to the dog scene. I was skeptical about putting my new Australian Kelpie puppy in a "cage," but since Keli was part of a Canine Field Agent program for the Marin Humane Society where I worked as a Humane Officer, I was determined to do everything perfectly right. I reluctantly decided to try crating.

On the third night, when I went to deposit Keli in her crate, I found Caper, my three-year-old Bull Terrier, happily curled up in the pup's den. Caper smiled up at me and thumped her tail in the blankets, clearly saying, "This is wonderful! Can I have one of my own? Please, can I?" I bought Caper a crate of her own the next day, and have been a total crate advocate ever since. How could they now be perceived as a bad thing?

As I followed the discussion, I realized that the negative crate perspective stemmed from concerns of "overcrating." Apparently some owners crate their dogs all day while they're at work, let them out for a couple of hours when they come home, and then crate the dogs all night while everyone is sleeping. This, some shelters fear, is too much time in a crate for a dog's physical and mental health.

They're right.

The crate is an invaluable management tool. Like any training tool, it can be misused. Even when used properly, it's not necessarily the appropriate tool for every dog in every circumstance. The discussion that follows may help you decide when, and whether, it's the right choice for you and your canine pal.



In some homes, all the dogs sleep in their own crates, putting an end to middle-of-thenight "arguments" over the fluffiest cushions or another dog's toys.



WHAT YOU CAN DO ...

- Start your new dog or puppy off right with a crate. See "Crate Training Made Easy," August 2000, for more information on basic crate training.
- Make sure your dog's crate is large enough to enable him to turn around easily and sleep in his preferred position, and contains enough bedding to keep him comfortable.
- Don't ignore a developing behavior problem when crating your dog; most won't improve "on their own." Act quickly to implement an appropriate solution, before his tolerance or affinity for the crate is gone.

Overcrating

A properly used crate can be the answer to your housetraining prayers. I was astounded by the ease with which I was able to housetrain my Kelpie pup. I also, however, was in the enviable position of being able to take my baby dog to work with me, so I was never tempted – or compelled – to crate her for longer that she could "hold it."

If you're a normal person whose boss frowns on dogs at work, you simply can't crate your pup all day while you're gone. He'll be forced to eliminate in his crate, breaking down his inhibitions against soiling his own den – the very inhibitions you rely on to be able to accomplish housetraining.

A general rule of thumb is that puppies can "hold it" during the day for up to one



Crates are an invaluable tool for housetraining your puppy, but if overused, the pup's inhibition to soil his "den" may become diminished. Be alert to signs the pup is ready to "go outside."

hour longer than they are months old. In other words, your eight-week-old baby dog can be crated for perhaps up to three hours during the day. They can usually go somewhat longer at night because metabolism slows, but it's a rare two-month-old who can go through the night without a potty break.

So, you can only crate your pup during an 8- to 10-hour workday if you can arrange for at least *two* bathroom breaks. One quick run home at lunch won't be enough, at least not until he's five to six months old.

In addition to performing necessary bodily functions, a growing pup needs to move around in order to develop properly. Some runaround time during the day helps him develop mentally and physically, practicing skills and learning lessons he can't make up later in life.

Finally, a pup who spends his entire day in a crate stores up mental and physical energy. When an owner comes home exhausted after working all day, she's rarely in a state of mind to cope with pent-up puppy frenzies, or to provide adequate exercise and mental stimulation to make up for a day of relative deprivation. The relationship suffers, and the pup gets relegated to the backyard, alone, or worse – put back into the crate.

While adult dogs are more physically capable of "holding it" for extended periods than puppies, it's still not appropriate for a dog to be routinely crated for 10 hours. Hence, the concerns of adoption agencies.

Solution for overcrating

Alternatives to crating include finding alternative confinement options, arranging for multiple bathroom breaks, or finding a daycare situation of some kind.

Some owners simply leave their dogs – including puppies – outside in a fenced yard during the day. This allows the dog total freedom to poop and pee at will. It also leaves him vulnerable to threats from the environment – theft, poisoning, accidental escape, snakes, raccoons, skunks, coyotes. I even met a pup once with a huge scar across his back – souvenir of a brief flight, fortunately aborted, in the talons of a Golden Eagle.

Outdoor confinement also leaves the dog free to practice inappropriate behaviors such as digging, escaping, and barking, and exposes him to the extremes of weather.

It might be safer to confine your pup indoors, either in a small puppy-proofed room such as a bathroom, or in a secure exercise pen. This requires newspapering the floor, and perhaps encouraging the dog to use one of the commercial pee pad products or a litter box, essentially giving him permission to eliminate in the house.

This solution has risks as well. Your pup can learn to rip up vinyl flooring and chew on cabinets if he's loose in a bathroom. He may be able to knock over his exercise pen if it's not well secured, climb out (some come with lids), or get a leg caught between the bars. If you plan to use an ex-pen, get him used to it while you're home, to be sure none of these things are likely to happen.

Multiple bathroom breaks may be easier than you think. If there are two adults in the household, perhaps you can stagger your lunches – one at 11am, one at 1pm – to give him two breaks. If not, a commercial pet sitter can take a daily turn at potty breaks. Other options include friends, neighbors, or



For housetraining success, provide your puppy (or new dog) with frequent opportunities to relieve himself in an appropriate place. Don't leave him in the crate longer than he can "hold it."

family members who live close enough to provide the service until the pup is older. You might even find a local teenage dog lover who would cherish the opportunity to earn some spending money.

Finally, Spot may just need to go somewhere else during the day. Commercial doggie daycare centers are increasingly popular and available.

Crate-soiling

If Spot eliminates in his crate even when *not* overcrated, your first course of action is to rule out medical problems. Loose stools, a urinary tract infection, or other incontinence problems make it impossible for a dog to hold it for normal periods of time.

Assuming all is well, there are several other possible causes of crate soiling:

■ Your dog has been routinely overcrated in the past, and was forced to soil his crate. His inhibitions against soiling his den have been damaged. He now thinks the crate in an acceptable bathroom.

■ Your dog isn't eliminating outdoors before being crated.

■ Your dog has separation anxiety (SA) and is voiding his bladder and bowels during his SA panic attack.

Solution for crate-soiling

Your approach to Spot's crate-soiling behavior depends on the cause.

If he has learned to soil his crate, it may help to change his bedding, or remove bedding altogether until he's retrained. Bedding that absorbs fluids, such as a blanket, can make it more comfortable for your dog to be in his soiled crate. His current bedding also may have become his preferred substrate. Try newspaper instead, a square of heavy duty compressed foam rubber (the kind used for flooring), or no bedding. A tether may be a reasonable alternative to nighttime crating.

Make sure his crate is the correct size – big enough for him to stand up, turn around, and lie down comfortably. If it's too large he can potty in one end and sleep in the other.

Perhaps you're just not making sure Spot eliminates outside before you crate him. In your morning rush to get to work on time, you let him out in the backyard and assume he empties before he comes back in. That may be an incorrect assumption. If it's cold or rainy, he may have huddled on the back porch, waiting to be let back in. Perhaps he was distracted digging for moles under a bush, or barking at the kids walking past the yard on their way to school. Maybe he gets a cookie for coming back into the house, so he's skipping the step where he's supposed to go pee on the grass first. It could be a substrate preference problem - he wants to pee on grass, and all he can find is snow!

Set your alarm to awaken you 15 minutes earlier than normal, so you can go out with Spot on leash before and after he eats his breakfast to make sure he's empty when you crate him. If he's reluctant to out in inclement weather, create a sheltered potty spot, so he doesn't have to eliminate with rain or snow dumping on his head, or strong winds buffeting him. Would *you* be able to "do your business" under those conditions?

If he's determined to go on grass, it's the dead of winter and there's no grass available, you may need to scrape snow away from the grass in his sheltered potty spot or provide indoor-grown grass until you can teach him a new substrate preference. Maybe Astroturf would work!

Refusing to go into the crate

Dogs who refuse to enter their crates may have never been crate trained, or the crating process was somehow abused. Spot may have been overcrated and now resists entering a den he fears he'll be forced to soil. Perhaps someone previously used his crate as punishment, or forcibly crated him. He may have had a bad experience in a crate that may have been improperly secured and rolled with him in it, or by having loud noises or other fear-inducing stimuli occur while he was crated.

Learning to love the crate

Whatever the reason, you'll need to embark on a program of counter-conditioning and desensitization to change Spot's association from bad to good, and retrain his crating behavior.

Start by scattering yummy stuff around the outside of his crate, placing a couple of tidbits just inside the door so he can stick his head in to get them. Gradually toss more yummies inside the crate to entice him further in. When he's going in easily, start handfeeding tidbits while he's inside, to encourage him to stay in. If you use a clicker, you can now begin to click! and give him a treat for going into the crate. When he'll go in and stay calmly inside the crate while you feed treats, close the door gently, feed treats through the door, and then let him out. Gradually increase the length of time you keep the door closed, until he's quite comfortable with this step. Then take a step away from the crate, click! and return to give him his treat. Continue this process until he is happy to enter and stay in his crate.

You can play another crating game to motivate your dog to "kennel." Take something scrumptious, like a meaty knucklebone, and put it in the crate. Show it to your dog, then close the door with him *outside* the crate. Let him spend some time trying to get *into* the closed crate to get at the bone, then open the door allowing him to zoom in (and back out, if he wants) to claim his prize.

To keep crating fun for your dog, be sure to practice crating games often, not just when he's going to be crated for extended periods. You can also give him food-stuffed Kongs and other interactive toys to keep him happy in his crate.

If your dog absolutely refuses to enter the crate, get one that comes apart. Take the top off, then start the counter-conditioning process.

Demand barking in crate

Sometimes barking happens because the dog really needs to go. While it's critically important to heed your dog's bathroom calls, it's equally important not to succumb to crate barking when it's simply his insistent plea to get out and play, or cuddle. The more often you let him out on demand, the



We often recommend that owners use food-filled toys (such as a Kong, seen here) to keep a dog busy and content in his crate. This practice should be discontinued, though, if the treat triggers any guarding behavior.



Don't respond to your dog when she barks for attention in the crate. You'll quickly teach her to bark louder and longer if you do.

more the behavior is reinforced, and the harder it will be to ever successfully train him to stay quietly in his crate.

Solution to barking in crate

If you're just starting your dog's crating lessons, be sure he empties his bowels and bladder before you begin, so you know he doesn't have to go. Ignore his barking, and let him out of the crate when he's quiet. At first, he may be quiet for just a few seconds. Mark the quiet with a "Yes!" or a click! so he knows it's the quiet behavior that gets him out of the crate. Gradually increase the length of quiet time before you let him out.

If your dog has already learned to demand-bark to gain freedom you'll follow the same procedure as above. However it will take longer to extinguish the behavior because it's been previously reinforced. Your dog is likely to go through an *extinction burst* – more and/or louder barking, as he tries to make this formerly successful behavior work again. Be strong; if you give in during an extinction burst you will reinforce your dog for an even *more* intense behavior, and it will be even harder to make it stop.

At first, listen for and reinforce even very brief pauses in barking. You have to show your dog what behavior *will* work – quiet – if you want him to offer more of it.

Panicking in the crate

This is very different from demand barking. Some dogs, particularly many of those with separation anxiety (SA), can't tolerate the close confinement of a crate. They experience a full-blown panic attack, and frantically try to escape from their prison.

A panicked dog's efforts to escape from his mental and emotional anguish may include hysterical, non-stop barking and howling – for hours and hours without pause; frantic attempts to bite and claw his way out – often breaking teeth and ripping out nails in the process; and stress-induced urination and defecation – which he proceeds to paint all over the walls of his crate as he thrashes around.

Solution to panic: Don't crate

You cannot subject a panicked dog to these conditions. You must address the SA problem through behavior modification, and *may* someday be able to use a crate with your dog, if you are successful in modifying the SA. In the meantime, look for doggie daycare-type management solutions.

Aggression in crate

Some dogs become ferocious in their crates, usually manifesting territorial aggression, fear aggression, or resource guarding. The behavior is alarming, especially to an unsuspecting passer-by – human, canine, feline, or other – who inadvertently walks too close to the crate and is greeted with a fierce roar and crash when the dog lunges into the side of his kennel.

Manage aggression in crates

Management is your best approach to this behavior, followed by behavior modification.

Dogs who are aggressive in their crates shouldn't be subjected to environments in which the behavior is constantly triggered. These dogs should not, for example, be left crated and unattended at canine sporting events. If children are in the household, they must not be allowed to approach Spot in his crate.

Some dogs will crate calmly if the crate is covered to reduce the stimuli that triggers their aggression. Others do well as long as there's nothing of high-value to be guarded in the crate, such as a favorite toy or stuffed Kong.

If Spot is fearful, taking refuge in his crate out of fear, be sure to do nothing to intimidate him while he's crated. No reaching in, for example, to remove bowls, toys, or dog from crate. You may do better to refrain from crating a fearful dog until he's become more confident with you, to avoid setting him up for crate aggression.

To modify crate aggression, return to your old friends, counter-conditioning and desensitization. If your dog is aggressive to passers-by, arm yourself with a large supply of high-value treats (canned chicken, rinsed and drained, works well), and sit next to the crate. When your dog alerts to a member of the trigger species (whether it is dog or human) passing at a noticeable but lowarousal distance, begin feeding him treats, non-stop, until that someone is gone. Each time the trigger appears, wait for your dog to notice, then start feeding him tiny tidbits of chicken, non-stop, until the trigger is gone.

Keep watching your dog's reaction. You're looking for his response to the appearance of the trigger to change from wary or alert to "Yay! Where's my chicken!" When you get the latter reaction consistently, move the trigger closer and repeat the lessons, until the trigger can pass next to the crate.



As a first step with dogs who are reluctant to go in their crates, lock away their favorite toy or treat inside. Let their anticipation build before opening the door to let them go in and get it.

If *your* approach triggers an aggression response, do lots of practice sessions where you walk up to the crate and drop chicken into it, so your dog learns to associate your approach with good stuff. Never punish your dog for being aggressive in his crate – you're likely to make the behavior worse!

Crating choices

Some dogs crate best in wire crates, others seem to prefer the plastic airline-style kennels. Portable, collapsible soft crates have become hugely popular. Some owners only crate through the puppy stage, others use crates throughout their dogs' entire lives. Both are acceptable.

Despite the potential for crating woes with some dogs, I remain a staunch fan of this invaluable management tool. We can educate owners about proper crate use to avoid overcrating and other abuses. The crate is so useful, it distresses me to hear that some well-meaning shelter folks have such a low opinion of it. Let's not throw the puppy out with the bath water!

Pat Miller, CPDT, is WDJ's Training Editor. She is also author of The Power of Positive Dog Training, and Positive Perspectives: Love Your Dog, Train Your Dog. For book purchase or contact information, see "Resources," page 24.

All Male Review

Anatomy and physiology of the male dog's reproductive system.

BY RANDY KIDD, DVM, PHD

he reproductive system has what seems to be a relatively simple task: to provide the mechanisms necessary to maintain survival of the species. However, the mechanisms involved are complex, and maintaining a functional balance of the hormonal, mechanical, and physiological requirements for reproductive success can be difficult at best. What's more, while dogs (and for that matter, all animals) are hard-wired to maintain reproductive viability at all costs, very small alterations in the balance of any one of the functions involved with reproduction can produce profound results throughout the body.

This month, we'll examine the male reproductive anatomy and physiology, and deal with the female next month.

Anatomy

The scrotum is the pouch of lightly haired skin that contains the paired testes and their attached epididymides. The testes are the functional units that generate the production of sperm; they also contain cells that produce a variety of hormones.

The reproductive "plumbing" begins with the seminiferous tubules, which coil



WHAT YOU CAN DO . . .

- Make sure that your intact male is examined at least yearly for testicular and prostate tumors.
- Don't rely on neutering alone to prevent or stop all behavior problems in a male dog.
- Ask your holistic vet about giving your neutered dog an herbal supplement that contains anabolic steroid precursors.

throughout the interstitial tissues of the testes. Each seminiferous tubule empties into an epididymis, which, in turn, empties into a vas deferens, which in turn opens into the urethra. The primary function of the testes is to produce the male gametes or spermatozoa; this process is termed spermatogenesis and takes from 55 to 70 days in the dog.

The exact timing of testicular descent into the scrotum has not been established, likely due to the small size of neonates, the softness of immature testes, and the tendency of the cremaster muscle to hold immature gonads in the inguinal region.

In one study of Beagles and mixed-breed dogs, the testicles were in their final scrotal position at seven weeks of age. In another study (of German Short-Haired Pointers) there was a correlation between the time of passage of testes through the inguinal canal and completion of deciduous dentition – they both occurred at about 30 to 35 days of age. Unilateral or bilateral cryptorchidism results if one or both testes remain within the abdomen after closure of the inguinal canal.

The penis develops from the same embryologic tissue as does the female's clitoris, and the testes are derived from the embryologic tissue that produces the female ovaries. Development into male or female depends on the presence of the Y chromosome, which fosters the production of testosterone, thus promoting the development of the male sexual characteristics. In the male canine embryo, the mesenchymal tissue inside the glans penis ossifies to form a bony os penis.

The penis of the adult dog is composed of the proximal body and the distal glans penis, which includes the bulbus glandis and the pars longa glandis. The bulbus glandis is a cavernous expansion of the corpus cavernosum urethrae. It surrounds the proximal portion of the os penis, and when it fills with blood during erection, it expands into a bulb-like structure that is held within the female's vagina during copulation.



Castration is not guaranteed to improve the behavior of adult male dogs.

Disorders of the male canine reproductive system

There are several disorders of the canine male reproductive tract that deserve mention. They can be categorized into congenital defects, acquired disorders, neoplasias, and functional disorders.

Congenital defects of the penis are relatively rare, but include the following:

■ Penile hypoplasia (incomplete or underdevelopment), usually due to aberrations of the XY chromosomes.

■ Hypospadia, a defect that results in an abnormal location of the urethral orifice.

■ Persistent penile frenulum. Normal separation of the glans penis from preputial epithelial cells occurs before birth. If it doesn't, a tag of skin that restricts movement may cause the penis to deviate.

■ Congenital preputial stenosis (a narrowing of a duct or canal) often occurs with concurrent phimosis (entrapment of the penis within the prepuce). **Cryptorchidism** is a congenital condition in which the testes fail to descend into the scrotum. The condition may be bilateral or unilateral (75 percent of the cases are unilateral). It is considered the most common reproductive disorder in dogs, affecting between 1 to 15 percent of dogs, and it is inherited as a sex-limited autosomal recessive trait. Since cryptorchid testes have a much greater risk (6- to 13-fold) for developing Sertoli cell tumors compared to normal testes, and since the trait is inherited, bilateral castration is recommended, even in cases of unilateral cryptorchidism.

Acquired disorders include:

■ Injury/contusion to either the penis or testicles, perhaps as a result of fighting or failure to jump cleanly over a fence.

- Fracture of the os penis, again from trauma or as a result of a breeding accident.
- Balanoposthitis, inflammation of the glans penis and prepuce, generally from a bacterial infection.
- Paraphimosis, a failure of the glans penis to retract normally into the prepuce.

■ Inflammation or infection of the testes is termed orchitis; epididymitis or inflammation of the epididymis may also occur. Either of these can be caused by any number of bacteria.

Of particular interest is **brucellosis**, an infection that causes resorption of the fetuses early in gestation or sudden abortion during the last trimester of pregnancy. Caused by the *Brucella canis* organism (or occasionally by *B. abortus, B. suis,* or *B. melitensis),* it is a highly contagious disease that can spread rapidly through a kennel by contact with infected fetuses, vaginal discharge, or occasionally by venereal means. Infected male dogs may develop generalized swellings of the lymph nodes, and they frequently show signs of a painful orchitis, epididymitis, or prostatitis.

Neoplasias of the penis run the gamut of common types of tumors seen at other body sites, and, except for transmissible venereal tumors (TVTs), they usually occur in older dogs, beginning at around 10 years of age or older. TVTs generally occur in younger dogs since they are transmitted at coitus. TVTs grow, invade, and metastasize most widely in an immune-compromised individual, so immune-supportive therapy is indicated as a part of any holistic protocol for treating them.

Tumors of the canine testes are the second most common neoplasm affecting the male dog, representing about 5 to 15 percent of diagnosed tumors. Tumors may develop in any of the tissue types that occur in the testes, but the most common tumors involve the germ cells (seminomas) and tumors of the Leydig and Sertoli cells. Dogs with undescended testicles (cryptorchid) are much more likely to develop testicular tumors, specifically Sertoli cell tumors and seminomas, than are normal dogs.

Testicular tumors may be asymptomatic; many occur as a difficult-to-palpate, discrete mass within the testis. Most do not grow rapidly nor metastasize to other body sites.

Meanwhile, at the Other End of the Dog...

Pheromones and the **vomeronasal organ** or the **Organ of Jacobson** (named after the sharp-eyed Danish anatomist who discovered it nearly two centuries ago) are extremely important components of the reproductive system in dogs. There are important, if not essential, scent-related components to reproduction; many of these scents are apparently only detected by the olfactory cells connected to the vomeronasal gland.

The vomeronasal organ in most species (including the human species) is composed of two short tubes with tiny, slit-like openings into the nares, tucked away just below the floor of the nose. They are the processing center for pheromones. The tubes of the organ are equipped with sensory cells that appear to be quite different from those in normal olfactory cells.

Pheromones (from the Greek roots *pherein* "to transfer," and *hormon*, "to excite") are substances capable of exciting at a distance. Sex pheromones are not detected by the normal olfactory pathways, but when wafted from a sexually available female, they can be detected by the male's vomeronasal gland from miles away.

Some (slightly more than half of all) Sertoli cell tumors result in a feminization syndrome as a result of the production of estrogenic steroids by the tumor tissue. The feminization syndrome may cause significant dermatologic changes such as hair loss without itching and hyperpigmentation; behavior changes may also be noted. Seminomas may be associated with other clinical problems such as prostate disease, alopecia, perineal hernia, and other tumors (especially perianal gland adenomas).

Prostatic tumors include adenomas, which are generally benign, and adenocarcinomas, which can be quite difficult to treat since they tend to metastasize to other tissues rapidly and because complete surgical excision is rarely possible.

Tumors are treated via Western medicine by the usual means: surgical excision, and/or some form of chemo- or radiationtherapy. Alternative therapies for tumors of any type include homeopathy or acupuncture; nutritional supplements and herbal remedies may be included to support the primary therapy of choice.

Functional disorders

Failure to achieve an erection is a fairly common functional disorder of the male dog. Reasons for this condition include:

■ The female is not at the receptive stage of heat (this is the most common cause).

■ Pain (from prostatitis, for example, or arthritis or other conditions of the hips, legs, or lower back), which prevents mounting of the female.

■ Fear/anxiety about the female or the breeding environment.

■ Drugs that have anti-androgen activity – for example, ketaconazole, a commonly used drug for treating fungal infections.

■ Priapism, which is a persistent erection in the absence of sexual stimulus, is occasionally seen in dogs with spinal lesions. Rarely, it occurs due to thromboembolism of penile vasculature. This condition differs from the frequent erections seen in young excitable small breed dogs, which respond to behavioral modification, castration, and/or progestin therapy.

Prostate problems

The prostate, an accessory sex gland in the male dog, is located just caudal to the blad-

der in the area of the bladder neck and proximal urethra. It encircles the urethra and has several ducts that enter the urethra throughout its circumference. It produces prostatic fluid, which acts as a transport and support medium for sperm during ejaculation.

The prostate increases in weight with age until it reaches its normal size; it then stabilizes through adulthood until it begins to grow again in aged animals. However, if the dog is castrated before sexual maturity, normal growth of the prostate is completely inhibited. If the dog is castrated as an adult, the gland will decrease in size to about 20 percent of its normal adult size.

Some practitioners refer to age-related prostatic weight increase as benign prostatic hyperplasia (BPH), a condition commonly seen in aged humans. In contrast to human males, however, the uncastrated dog's prostatic enlargement usually does not cause dysuria (difficulty in urination) due to urethral obstruction; the dog's prostrate tends to enlarge outward, away from the urethra. Treatment may be required only if the enlarged prostate causes abnormal signs such as dysuria or straining when defecating.

Other diseases of the prostate are fairly common, especially in the older dog, and may lead to fertility problems. In the aging dog, fluid cysts may develop in association with age-related hyperplasia.

Urinary incontinence

True incontinence (involuntary urine leakage) must be differentiated from behavioral urinary issues such as lack of housetraining, submissive urination, territorial marking, or senile loss of housetraining due to canine cognitive dysfunction.

There are several causes of incontinence, including excessive water consumption; infection of the urinary tract or bladder stones (either of which can cause irritation and stimulate the "need to pee" feeling); spinal cord irritation; weak bladder sphincter; and several diseases, including diabetes mellitus and diabetes insipidus, Cushings syndrome, and kidney failure.

Western medicine treatments have included hormone therapy, alpha-adrenergic agonists, anticholinergics, and surgery. All of these except the anticholinergics work by attempting to restore neuromuscular control and tone to the bladder sphincter. The anticholinergics work by relaxing the bladder's muscle fibers, thus facilitating urine storage.

All of these treatments (with the exception of surgery, which has not been very successful without additional medications) have proven to be fairly effective. The problem is, all the medications listed above may cause severe side effects, and some have been removed from the market. Both phenylpropanolamine, the popular alphaadrenergic agent, and diethylstilbestrol (an estrogen), are now available from special pharmacy compounding outlets.

My choice for treating urinary incontinence is to first of all perform a chiropractic evaluation and adjustment if indicated. Many patients respond to this initial treatment, and periodic adjustments seem to keep their spinal cord fit enough to allow for urine retention. If indicated, I also add acupuncture treatments for their ability to help enhance the balance of hormones throughout the body, as well as for their ability to treat spinal or other inflammatory conditions that might exist.

There are also several herbal remedies that have been especially developed to help with treatment of this condition, and in my mind the idea of treating all castrated individuals with herbs that contain steroidal precursors warrants further study.

In any event, only after I've tried all the alternatives am I tempted to resort to Western medicine drugs.

Fertility evaluation

There are several ways to evaluate the functional capacity or breeding soundness of the male dog, including observation of sexual behavior (libido), general health, soundness of rear quarters, spermatogenic capacity, and functional evaluations of other, associated organ systems.

Daily spermatozoa production is highly correlated with testicular weight and this latter highly correlated with scrotal width. Scrotal widths are measured with calipers.

The ejaculate should be evaluated for sperm count, motility, and morphology. Frequency of ejaculate does not affect daily sperm production, but it depletes the sperm reserves contained in the epididymis. Thus, when high sperm concentrations are desired (for example, when sperm are being collected for preservation), the number of sperm is maximized by having the dog ejaculate only at four- to five-day intervals.

Healthy animals have a high percentage of sperm that are actively and rapidly swimming in a freshly collected sample. Sperm morphology is evaluated by staining the cells and observing them under a microscope. Stained slides may also reveal the abnormal presence of high numbers of bacteria, white blood cells, or red blood cells. At least 75 percent of the sperm cells should be morphologically normal.

Sometimes, fertility evaluations include an examination of the bacteria that resides in the prepuce and distal penile urethra of the male. However, even perfectly healthy and fertile dogs have a normal population of bacteria in those locations. There are often at least three or four different species of bacteria found.

On the other hand, some studies indicate that a high bacterial count, especially if there are high numbers of gram negative bacteria along with large numbers of white blood cells, indicates infection. If total numbers of bacteria are high, rule out infection as a potential cause of infertility.

Outside factors

Poor thyroid function is known to adversely affect libido and breeding soundness in animals, and other organ systems will likely be shown in the future to have intimate connections to the reproductive system. A complete breeding soundness exam will certainly include an evaluation of thyroid function, and an evaluation of other organ systems may also be indicated.

Recently, there has been much to-do about estrogenic factors in the environment – airborne "sexual toxins" such as pesticides, herbicides, and manufacturing by-products of plastic production. This news is worth following.

Some final breeding hints:

■ Be certain the dog has reached puberty.

■ The dog's libido and efficiency will increase with age and experience – at least, until the onset of old age problems.

■ Be certain that the female is truly in standing heat. To be sure, use a combination of hormonal, cytological, endoscopic, and behavioral evaluations for the female.

■ Wherever possible, stay out of the way and let nature take its course. The second most common cause of breeding failure is well-meaning folks who feel the need to interfere and thus disrupt the "ambiance" necessary for good reproductive contact.

■ Realize that sometimes the mating was simply not meant to be. Sometimes, for whatever the reason, the couple may not be attracted to each other, and they may never be able to "hit it off."

Alternative treatments

I think acupuncture and chiropractic are essential when treating at least two conditions of the reproductive system: incontinence and breeding soundness. I've had very good results in some (but certainly not all) cases of urinary incontinence using chiropractic adjustments alone or in combination with acupuncture. The typical animal who will benefit from chiropractic adjustments will have a palpable subluxation somewhere between T-12 and L-3.

Acupuncture and chiropractic have also cured many an animal from "infertility" that was caused by pain in their hindquarters. Acupuncture has been shown to enhance sperm production, libido, and overall vitality.

Herbal remedies offer a good alternative way to treat bacterial infections. Antibiotic herbs such as goldenseal (*Hydrastis* *canadensis*) and Oregon grape root (*Berberis aquifolium*), and immunestimulating herbs such as echinacea (*Echinacea spp.*) apply here.

In addition, I think it is healthy to support male hormone production after an animal is castrated, even though I realize this is controversial. The major controversy seems to be that the phyto-hormones are not actually hormones, but rather, precursors to hormones. Those stuck on a biochemical paradigm say that only preordained amounts of the biochemical will be effective.

I happen to like the herbal remedies *because* they are precursors of the steroidal hormones; I like the idea that the animal's body can select the precursor it needs along with the amount it needs. To my way of thinking, this way of supplying a hormone has the best chance for being applied in a healthy manner by the dog's own systems,

and it has the least chance to interfere with the intricate feedback methods already in place in the body.

Some plants that provide anabolic steroidal precursors include wild yam (*Dioscorea villosa*), sarsaparilla (*Smilax* officinalis), licorice root (*Glycyrrhiza* glabra), damiana (*Turnera aphrodisiaca*), and saw palmetto (*Serenoa serrulata*). Check with an herbalist experienced with using herbs for treating animals for proper dosages and delivery methods.

Dr. Randy Kidd earned his DVM degree from Ohio State University and his PhD in Pathology/Clinical Pathology from Kansas State University. A past president of the American Holistic Veterinary Medical Association, he's author of Dr. Kidd's Guide to Herbal Dog Care and Dr. Kidd's Guide to Herbal Cat Care (see page 24).

To Neuter or Not to Neuter, That Is the Question

The number one cause of death in pet dogs in this country is euthanasia of unwanted animals. In other words, the number one fatal canine disease in the U.S. is overpopulation. If we really care about helping to create and maintain a healthy population of dogs, we must be concerned about the problems of overpopulation, and neutering is one sure method for controlling populations.

Castration is the removal or destruction of the gonads, rendering the castrated individual incapable of reproduction. By definition, castration applies to both the female (removal of both ovaries) and the male (removal of both testes). However, common usage generally refers to female castration as "spaying," and in the male the procedure is called castration or neutering.

Surgical castration usually results in decrease or elimination of sexual behavior, erection, and ejaculation in the dog. Some males that were sexually active before castration may, however, continue to copulate after castration.

There have only been a few studies that have evaluated the effects of castration in dogs, and some of these have not included very large numbers of animals. Some of the positive benefits that seem to be supported by the studies include decreased aggressive behavior, decreased urine marking, reduction in benign prostate hypertrophy (BPH), and decreased mounting of other dogs and people.

Many practitioners and trainers indicate that castrated dogs roam less to find a mate (generalized roaming may not diminish), and that there may be some reduction in aggression. However, I always tell folks not to count on castration as a substitute for behavioral training; the positive benefits are not observed in all castrated animals.

There will, of course, be a decrease in testicular cancers, since there will no longer be a testicle for the tumor to grow in. Castration does not seem to affect the incidence of prostatic tumors one way or the other.

DISADVANTAGES OF CASTRATION

There are so many advantageous reasons for neutering dogs, I hate to mention the possible disadvantages. Some castrated animals become somewhat lethargic and some will ultimately put on weight. The incidence of urinary incontinence in the aging animal appears to increase after castration, but the overall incidence of this appears to be low.

Recent studies indicate that testosterone and estradiol have a long-term protective effect on the nervous system (of humans). One wonders if the rash of cognitive dysfunction we are seeing in aging dogs is somehow related to a diminished supply of the sex hormones in castrated animals. To my mind, this provides us with one more reason to consider herbal and nutritional supplements for the castrated animal; it is not necessarily a reason to *not* castrate.

For several years I've been grappling with concerns relating to potential (and as yet unknown) negative effects we may cause in the overall health of the animal by suddenly removing a major source of its hormones. Although millions of animals have been castrated, seemingly without dire results, we simply do not know what "crimes against nature" we may have wrought.

Of course, an owner could have a veterinarian perform a vasectomy – a surgical procedure that removes all or part of the vas deferens, thus preventing sperm from entering the male's ejaculate – rather than castration on a dog. This is a rather unpopular procedure, however, since dogs that receive a vasectomy have just as much circulating testosterone as ever, meaning the behaviors that so many people find problematic – roaming in search of mates, urine marking, aggression – will be absolutely unaffected by the operation.

My answer, although I realize it is not without controversy, is to recommend castration along with herbal and/or nutritional balancing supplements, and to continue to push for more scientific information regarding the long-term effects of castration.

The Holistic Paradigm

Holistic healthcare isn't just improving the diet or using herbs.

BY GREGORY TILFORD

B art, a two-year-old Husky in Palm Desert, California, licks his paws incessantly and is always itchy. This morning he also vomited. Not in the easy-to-clean patio, but in the middle of the kitchen floor.

"At least it wasn't on the sofa this time," mumbles Linda, his guardian, as she rummages beneath the sink for a bottle of household spray cleaner. Finally she finds it – the good stuff – the same brand that her mom used when she was a kid. She cleans up the mess and gives the spot an extra squirt and a light wipe, leaving the spot a little wet to assure an extra measure of disinfectant action.

In the living room Bart is still chewing. Linda looks at his paws and sees that they are raw and scabby between the toes. As she strokes his coat she notices a strange lump on his front leg. It wasn't there before.

"This isn't just fleas," she thinks to her-

self. "It can't be! I just had the entire yard sprayed last week. Besides, it has been too darned hot to leave him in the yard much, and he hasn't had a flea on him since he got his spot-on flea remedy last month."

Linda figures that it isn't food allergy, either. She spends a lot of money on his dog food – the best natural recipe kibble she can get at the health food store. Sometimes Bart even eats home-cooked food, and he gets essential fatty acids, digestive enzymes, and a vitamin supplement with each meal. And as if that isn't enough, Bart also gets twice daily doses of a dandelion/milk thistle herb tincture product that the holistic vet said is supposed to support Bart's liver and help his body detoxify.

But his problems aren't improving, and Linda is becoming discouraged. She lights her last cigarette and sits down by Bart's bed. "Is this whole natural pet care thing just nonsense? Am I getting ripped off?" she wonders.



One important aspect of holistic dog-keeping is choosing a dog that is naturally suited to your environment. Keeping heavy-coated Northern breeds such as Huskies or Malamutes in a hot and/or humid climate puts the dogs at a health disadvantage.



WHAT YOU CAN DO . . .

- Reduce the number of chemicals in your home. Use safe, natural cleaning products, low-toxic water-based paints, and natural fibers.
- Avoid pesticide use in favor of integrated pest management (see "Eliminate Fleas Without Poisons," March 2002.)
- Reduce the causes of stress in your dogs' lives – overactivity, excessive noise, social isolation.
- Find a holistic veterinarian before you need one!
- As always, feed the best-quality diet you can afford. Include fresh, wholesome "human" food whenever possible.

Incomplete understanding

Bart and Linda's dilemma is not unique. Several thousand other people will likely become discouraged each year by disappointing results from the natural products they buy and use. Many will abandon their pursuit of animal wellness altogether, returning to old ways of feeding bargainbasement foods and spending huge amounts of money on symptomatic treatment of their dogs' chronic disease.

Is it because most natural remedies don't work? Is it because natural-recipe foods are a waste of money?

Certainly not.

Indeed, there are some misleading label claims out there, and there are too many junk

products in the natural pet marketplace these days. But unscrupulous manufacturers of these products are not to blame for their failures.

In the case of Linda and many other holistically inclined dog lovers, failures in achieving desirable results do not rest with the foods, supplements, or holistic vet services they use, but with the mindset from which these products are used.

Bart's problems stem largely from what his caregiver has *not* considered. The fact is, Bart *is* well-nourished, and the herbs he gets probably *are* supporting his liver and helping to move toxins out of his body – but Linda isn't looking at the bigger picture, and his health may never improve until she does.

Bart's feet may be covered with sores because he is allergic to the organophosphate pesticides Linda sprays on the back lawn. Even worse, these organophosphates have been linked to non-Hodgkin's lymphoma, a type of cancer that has been on the rise in both humans and animals in recent years.

Or it may be the household cleaner she uses, which may harm Bart's liver as he licks it from his feet every day. It may even lead to cancer.

Then there's the spot-on flea pesticide she uses on him, a product that most people believe to be totally safe. Indeed, the manufacturer's own research says the product is toxic only to sucking insects and other invertebrates, and therefore it is safe for dogs. What the manufacturer *didn't* tell Linda or her veterinarian is that studies also show that the active ingredient in the product is a potential neurotoxin to mammals – after it is licked from the skin and ingested.

Nor was she told about the studies that suggest that long-term, recurrent use of the pesticide may cause chromosomal deformity (genetic disease) and thyroid disease. The fact is, nobody told Linda that most if not all of the spot-on flea killers haven't been studied enough to accurately predict what their long-term health effects are. Obviously, the manufacturers who are making millions off of the product aren't in a big rush to find out and tell people.

Then there is Linda's smoking habit. Secondhand smoke kills people, and there is no reason to think that it is any less harmful to dogs. In fact, since dogs age at a much more accelerated rate than we do, it is reasonable to think that their bodies may succumb to the effects of secondhand cigarette smoke more quickly than ours. So, is Linda wasting time and money on premium food and supplements? Not entirely; good nutrition and systemic support are always important. But Bart is not going to enjoy the full results of her efforts until she takes a hard look at the bigger picture. And that bigger picture includes Linda's lifestyle.

Holism can't be done halfway

The value of natural diets and supplements cannot be fully realized until the human caregiver is willing to adopt a holistic lifestyle. Likewise, no course of natural canine therapy can be entirely effective unless all elements of wellness are first considered. The word "natural" on a product label may lead some people to think that the product must be safer and deeper in its therapeutic or nutritional values, but the truth is that all this word really suggests is *the possibility* of greater purity and superior quality. Even cream-of-the-crop products that really *are* made with all-natural ingredients cannot guarantee any greater levels of efficacy over conventional alternatives *unless they are used as part of a holistic agenda that factors all elements of physical, emotional, and environmental health into the wellness equation.*

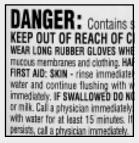
My intent is not to question the love, conviction, or intelligence of any of my

Tips On Getting Into the Holistic Groove

Remember: supplements only serve to *supplement* good food, proper exercise, and a healthy, happy environment.

Take time out every day to evaluate your own personal habits and behavior, and consider how these may affect your companion. Be brave. You might find that by adjusting or eliminating your own bad habits, both you and your dog will be healthier and happier! A great example is exercise. The best way to make sure your dog is getting enough exercise to keep him physically *and* mentally healthy is to take him on long – at least an hour or more – daily walks. If you do that, chances are you will lose some weight and gain fitness, too!

Read household product labels. Learn about what the ingredients are and the risks they pose. Be especially wary of insecticides, disinfectants, solvents, or any other chemicals that require label warnings. Products that are labeled with the signal word "Danger" are the most toxic. The signal word "Warning" indicates moderate toxicity. The word "Caution" indicates low toxicity. Ideally, your household products would be so safe they do not require a signal word on the label at all. (To learn more about signal words on household product labels, see "Danger Signals," WDJ August 2002.)



"Danger" = high toxicity.

Herbal, homeopathic, and energetic remedies are best to used in support of what the body is naturally designed to do: *heal itself and stay healthy*. These alternative or complementary therapies serve to stimulate or support natural body functions, meaning that proper nutrition, exercise, and a healthy environment must already be in place for such tools to be most effective.

Always strive to get to the root of your dog's health issues. Think holistically. Skin problems are seldom just skin-deep. Likewise, emotional or behavioral problems often stem from human influences.

Don't be afraid to question authority. Ask your veterinarian about the drugs she prescribes, and if you aren't satisfied with the answers, contact the drug manufacturer or do a Web search (there are dozens of databases) before you actually administer the drugs to your dog. At a minimum, you should be familiar with the signs of the most common adverse side effects before you start your dog on a course of any prescription drug – or even herbal or natural remedy.

readers, nor to denigrate anyone like Linda. But I remind you that we are all prone to becoming complacent when it comes to managing the health of our dogs. We are also prone to seeking out and getting what pleases us, even if it isn't in the best interests of those around us. Like Bart, the noncomplaining Husky who has been raised in a small apartment, in the hot, arid climate of Palm Desert. California. What was Linda thinking?

Even though my work and lifestyle immerses me in the world of holistic animal care each and every day, I, too, catch myself reaching for a quick fix at times when I should be looking deeper into my dogs' health issues. Just last week I caught myself giving Willow, my Shepherd-cross, an herbal breath formula without first checking her teeth and gums. I was busy, and it was two days before I remembered to examine her mouth carefully, to eliminate an oral infection as the cause of her bad breath.

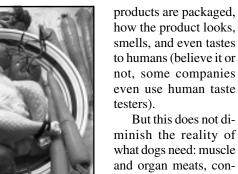
Loving someone is not always easy. And caring for someone holistically is not an easy job - especially when that someone is not human. And although it's great to include our dogs as members of our families, it is important to remember that they are really not like us at all. Sure, we can give them human names, dress them in silly clothes, give them fancy haircuts, and feed them foods that are packaged to appeal to human sight and smell - but we must always remember that their health is highly dependent on how well we are able to respect and honor the "ways of dogs." The family dog, after all, is still an animal by nature.

What I am saying may sound simple, but it's not. To accept and fulfil a dog's needs, we must put our human tendencies aside long enough to stop catering to our needs for conveniences and consider the effects of our own, human condition.

Diet as an example

Diet presents us with a perfect example of my point.

Dogs need foods that are fit for them, not necessarily for us. It is common practice for pet food manufacturers to draw consumers to their products by the way their



We know intuitively that fresh, real food is best, for the health of humans and dogs.

digestion). Which brings us to raw food many people will not feed it to their dogs simply because they (humans) find it too repulsive. The dog may not think it's repulsive, and he doesn't care about the shape or color of his kibble, either.

Consider negative influences

Thinking holistically also means going places within the human mind where we really don't like to go – places where we are forced to consider the consequences of our actions and reassess the impacts of our bad habits. In this uncomfortable place we are forced by our love to consider aspects of our own behavior that may contribute to the misery of our dogs. Loud music, angry arguments, cars with exhaust leaks, loud vehicles, new carpets and linoleum (toxic gassing), fresh paint, wood smoke, fireworks, or even a box of dark chocolates left out on the coffee table may contribute to our dogs' stress and increase risk of illness.

Then there are issues of unneccessary and/or over-vaccination, prophylactic use of antibiotics, tail docking, and ear cropping - things we would *never* do to our human children, but often will not think twice about when it comes to our beloved pooches.

Indeed, moving toward adopting a completely holistic lifestyle can be difficult but it's what true love and true healing are all about, isn't it?

Greg Tilford is a well-known expert in the field of veterinary herbalism. An international lecturer and teacher of veterinarians and pet owners alike, Greg has written four books on herbs, including All You Ever Wanted to Know About Herbs for Pets (Bowie Press, 1999), which he coauthored with his wife, Mary.

minish the reality of what dogs need: muscle and organ meats, connective tissues, raw bones, and even an occasional snack of pre-digested vegetable matter (dogs sometimes eat grass and other things twice, to improve

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- 2/04
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Report All Adverse Effects

A vet and a regretful owner ask you to help the FDA identify bad drugs.

 hank you for alerting owners to facts regarding veterinary drug safety in "The FDA, Drugs, and Your Dog," (WDJ February 2005).

Because of numerous documented canine deaths and serious illnesses secondary to administration of certain drugs, efforts are under way to promote stronger regulatory programs for veterinary drug evaluation, approval, and monitoring.

For these reasons, it is vital that any and all suspected adverse reactions to veterinary drugs be reported to the FDA. Cumulative data over many months may substantiate earlier reports and may also identify formerly undetected problems such as the recently identified link between NSAIDs and heart problems in humans. Reports should be made to FDA's Center for Veterinary Medicine at (888) FDA-VETS, and can be filed by owners as well as veterinarians.

Veterinary NSAIDs can provide great relief from pain and discomfort in dogs. However, side effects are not rare, and can include gastrointestinal injury, kidney or liver damage, hematological (blood) changes, neurological effects, and others, including death. At the first sign of changes in appetite, water consumption, or behavior, or of vomiting, diarrhea (with or without blood), weakness, or any other alteration from baseline "normal" for an animal, it is important that owners contact their veterinarian, an emergency facility, or the drug's manufacturer. Even minor appetite changes can signal rapidly developing gastric ulceration, for example, so quick action is essential. You should be instructed to stop giving the drug until necessary testing and/ or treatment is undertaken.

The FDA has directed that the manufacturers of some veterinary drugs, particularly NSAIDs, provide a "Client Information Sheet" (CIS), outlining which animals are appropriate candidates for receiving the drug, side effects to watch for vigilantly, and appropriate steps to take should they occur. Unfortunately, many veterinarians do not provide these to clients when dispensing these drugs, as manufacturers recommend. Clients should ask if a CIS is available when receiving medication for their dogs, and request one if it is.

Dogs cannot tell us how they feel when given a drug, nor do they control whether to take the medicine. For these reasons, dispensing drugs for dogs is similar to dispensing them for children; vets need to fill the role of "pharmacist" by thoroughly instructing owners regarding potential side

effects and steps to take if they are observed.

Owners, the only ones present outside the veterinary clinic to observe and report potential problems, need to function as part of the "team" overseeing the care of their animals. To do this, they must be educated about any drug dispensed. This education should come from their vet. If it does not, they need to investigate further on their own.

We all want the same thing

for our dogs: comfort, well-being, and safety. This supports the urgent call for heightened regulatory vigilance regarding veterinary drug safety. I also hope to see an increasing "partnership in knowledge" between those who dedicate their professional lives to caring for our beloved animals, and the owners who entrust them to their care.

Kathy Davieds, DVM Floyd, VA

ven though I have been a subscriber for many years and a believer in alternative medicine, I took my 14-year-old Lhasa-mix to my veterinarian because he had started limping on his back leg – the same leg that had ACL surgery two years previously.

Up until he started limping, Choo Choo was an active, happy dog who loved walks in the park. My vet prescribed Deramaxx, which I dutifully gave my dog. I attributed his lack of appetite and lethargy to his bad leg and depression. When he had a bout of diarrhea, I didn't worry because he sometimes had a sensitive stomach. Then one morning, he woke me by coughing and struggling for breath. I rushed him to an emergency clinic where they tried to save him, but my little dog died.

Afterward, I got on the Internet and investigated Deramaxx, and found I wasn't the only pet owner whose dog died under



Use NSAIDs with care; read the product insert before administration.

similar cirumstances. My vet doesn't hand out medications – a technician does. The medications are sometimes presented in a vial but mostly they are in an envelope. There is no information given on possible side effects or what symptoms to watch for. When I questioned my vet on this, he said if he gave that information out,

people wouldn't give drugs to their pets.

The drug's manufacturer, Novartis, sent out warning letters to veterinarians regarding prescribing Deramaxx to senior pets. They recommended doing blood tests prior to administering the drug and warning clients of possible side effects. Was any of this told to me? No. All my vet said was that he gave the drug to his dog, and if he thought it was harmful, would he continue to do so?

It's obvious that doctors, both animal and human, believe whatever the pharmaceutical companies report on their drugs because that's how they were trained. Most know nothing about alternative treatments and are not interested in learning, either.

I will always blame myself for my dog's death by not stopping the treatment sooner. Had I known the side effects of Deramaxx, I would never have given it to my dog. I will never again be so ignorant with the health of my other dogs.

Name withheld by request

GO GLUTEN-FREE

read "Going Gluten-Free" (WDJ March 2005) with great interest. Dr. John Symes advises your readers with dogs – all dogs, not just those that show symptoms of poor digestion – to choose gluten-free foods that do not contain wheat, barley, rye, soy, corn, and rice. As such, it occurred to me that your readers may be interested in learning more about new Innova EVO, a grain-free, low-carb dry food that fits Dr. Symes' recommendation to a "T." More information about EVO can be found on naturapet.com or by calling (800) 532-7261.

Peter Atkins, Vice President Natura Pet Products, San Jose, CA

WOLF DIETS

n "What a Wolf Eats" (March 2005) the author stated that, "The wolves at the [Wolf Conservation] Center are fed dry dog food and fresh roadkill as it becomes available."

It is the WCC's preference to feed the wolves a primary diet of deer and other raw meats and bones. We believe that this is the most appropriate diet, and there is no shortage of road-killed deer here in the Northeast.

However, the WCC is only one facility in a network of 40-plus that participate in the Species Survival Plan (SSP) programs for the critically endangered Mexican gray wolf (*Canis lupus baileyi*) and the red wolf (*Canis rufus*). Each of these SSP programs has a management group that publishes the suggested animal husbandry practices for the facilities participating in the program. The management group for each of these species has determined that a dry food for "exotic canines" should be fed to the SSP animals as part of the protocol.

Since we are only one facility in a broader network of organizations working to save these unique animals from extinction, it is our responsibility to honor the rules of the SSP program. To accomplish the objectives of the SSP programs we feed deer carcasses and the dry food to these wolves.

The four Ambassador wolves at the Center that are not part of the SSP program are fed only a raw meat diet consisting of deer as the primary food.

Thank you for the opportunity to clarify this important point.

Barry Braden, Managing Director Wolf Conservation Center South Salem, NY

"Pets and PETA"

"On Trial," an article in the April issue about pre-market feeding trials conducted by pet food companies, and PETA's opposition to these and all other lab testing conducted with dogs and cats by pet food makers, triggered not the most mail we've ever received in response to an article, but certainly the most vitriolic. We're not going to bore you by repeating the attacks. Suffice to say about a dozen people (as of press time, anyway) cancelled their subscriptions to WDJ to let us know how they felt about criticism of the animal rights group.

It was interesting to us, therefore, that the total number of responses were almost evenly balanced, with about half of the letter writers expressing their opposition to PETA, and about half weighing in with unqualified support of the animal rights group. Here are some pro-PETA excerpts:

"I support PETA in fighting cruelty to animals for any reason. I object to any animal living in a laboratory, regardless of any perceived benefit."

"I would like to, effective immediately, unsubscribe from WDJ. I found many of your comments regarding PETA and pet food trials selfish and shortsighted. For example: 'We believe feeding trials provide information that is beneficial to the dogs that consume the food – *our* dogs.' This may come as a shock to you, but I also have concern for other dogs that are not mine, as well as other animals."

"I know PETA is a organization with a controversial image. I believe that you should not look at PETA for their media stunts and what you call propaganda. I think that you should question why PETA would waste their money to break down a company that provides food for our companion animals. I do not believe that PETA or any other organization would just attack Iams unless they found something to attack."

And in the other corner:

"I am totally against PETA, even though I hate that animals are used in lab testing. There is no way that lab testing using animals is fair to the animals used for testing."

"You exhibited a great deal of patience with the PETA group. They are often radical liberals who will seek any opportunity to challenge nearly anything for the sake of advancing their cause. Their goals are notoriety and power; material facts and specific allegations of "cruelty" often take a back seat to those goals."

"PETA cares more about triggering emotional responses – and especially, about the financial donations they receive from animal lovers (contributions totaled more than \$27 million last year) – than they do about working *with* industry to effect meaning-ful change. The improvements for lab dogs they forced Iams to implement seem to mean nothing to them. I give *my* money to groups that work for animals quietly and effectively, such as the Humane Farming Association."

PETA, it's clear, constitutes the third rail of animal journalism. But that's not what the article was really about! Happily, we also received feedback demonstrating that the article helped some readers learn about feeding trials, so they could make their own decisions about whether to seek or avoid buying foods that conduct these trials:

"As much as I love my dogs, and as much as I would do anything to protect them, I certainly do not want other dogs to suffer and die in the name of misguided science aimed at helping my dogs...

"Your article did an excellent job of presenting a balanced approach to the issues. Each month I learn quite a bit from WDJ on the subject that is most dear to my heart: my companion dogs. Believe me, there is nothing I appreciate more than solid information on their physical, mental, and emotional well-being."



RESOURCES

BOOKS

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

Dr. Kidd's Guide to Herbal Dog Care and *Dr. Kidd's Guide to Herbal Cat Care* are published by Storey Books, (800) 441-5700 or storeybooks.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.

TRAINING AND INSTRUCTION

The Association of Pet Dog Trainers (APDT) has references to member trainers in your area. Write to 150 Executive Center Drive, Box 35, Greenville, SC 29615, or call (800) 738-3647. The APDT database of member trainers can be seen at apdt.com

Pat Miller, CPDT, Peaceable Paws Dog and Puppy Training, Hagerstown, Maryland. Train with modern, dog-friendly positive methods. Group and private training, Rally, behavior modification, workshops, intern and apprentice programs. Call her at (301) 582-9420 or see peaceablepaws.com **HOLISTIC VETERINARIANS**

American Holistic Veterinary Medical Association (AHVMA), 2214 Old Emmorton Road, Bel Air, MD 21015. (410) 569-0795. Send a selfaddressed, stamped envelope for a list of holistic veterinarians in your area, or search ahvma.org

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The Thyroid/ Behavior Link

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