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No Nose, Good News

In which we brag, and are quickly "grounded."

BY NANCY KERNS

How often do I get the opportunity to unabashedly BRAG?! Not too often, so I'll make the best of it: In June, I was thrilled to learn that the *Chicago Tribune* named WDJ to its annual list of "50 Best Magazines" in the U.S. And, they ranked us at #11, just after *Consumer Reports* and just before *Time*. I still feel tingly!

I'm immensely grateful for the recognition and attention, and hopeful that the exposure might help more dog owners find their way to WDJ – and all the humane, effective, and even potentially lifesaving health and training tips provided by our expert contributors. Thank you, Chicago!

Fortunately, I was quickly brought back to earth by the very stuff WDJ is rooted in: dog problems that needed solving. This came in a couple of forms: a big red one and a smaller yellow one.

I sort of kidnapped Cody, a Lab-mix who belongs to a friend's family. The family, I learned, was in the middle of an emotional debate over the young dog's fate, with the dad threatening to send Cody to the pound and the mom and kids clamoring for clemency. I offered to take Cody home for an evaluation and some training – really, a cooling-off period for the combatants.

It turns out, I'm siding with mom and the kids. Cody is a lovely, sweet boy in desperate need of direction and approval. He's learning

a lot, and thriving on all the attention and company – and it's going to be really hard to send him home.

He does have some behavior issues to sort out. Not surprisingly, he's suspicious and wary of men. He expresses his anxiousness in their presence by putting all his hair straight up and growling in a most fearsome manner – while shrinking and ducking away in fear. So, daily, I'm practicing the counter-conditioning and desensitization program described by Pat Miller on page 13 of this issue. We go out looking for men, and I toss Cody treats as they walk by. Quite a thrill for a married woman!

Then Hannah, my brother's dog, came to stay for a week while my brother went on vacation with his girlfriend. Hannah's arrival was not a surprise, but the intense skunk smell

she was wrapped in sure was. It was a surprise, too, to Keith's new girlfriend, who rode in the car with Hannah for the hour's drive between Keith's picking her up at the airport and their arrival at my house.

Why didn't he warn us? My brother has NO sense of smell – none.

Well, it was a good opportunity for me to test some commercial skunk odor removers (results on page 20). And, as it turned out, it was a good "good sport" test of the girlfriend, too. She didn't say a word to him about Hannah's stench – and she *did* smell it. She passes, with flying colors!



NK

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

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Walking the Allergy Maze

Treating chronic allergy is a long and winding path; here are shortcuts.

BY RANDY KIDD, DVM, PHD

Over the years I have treated literally thousands of animal patients for allergic problems, using both Western and alternative medicine methods. I have a multi-tome library of books devoted to the subject of allergies, and my allergy file-folders bulge with articles from dozens of professional journals, magazines, and Web sites.

Still, I am searching for answers.

The more I think I know about allergies, the more I read and learn about them, the more confused I get. Nothing I have tried therapeutically works with *all* my patients; some patients get better with hardly any effort on my part; others finally respond to my third or fourth treatment protocol (or 9th or 10th); and some never respond, no matter what I try.

Often, as I try to figure out how to give some semblance of relief for a dog's itches, it feels like the three of us – the dog, the dog's caretaker, and I – are stuck in the midst of a huge maze, blindly trying to find our way to the outside. And, while there may be some general rules that can help get us through the majority of the mazes (see sidebar, page 6), each and every allergic patient has its own unique construct, and the

pathway through the maze is likely to be very different for every individual.

The following pathway in this article is meant to help you navigate *most* cases of allergy, *most* of the time.

How allergy manifests in dogs

Allergies can present as a variety of symptoms, but in the dog, the most common symptoms occur as skin irritations: itching, scratching, digging, and gnawing at the skin, often to the point of creating open raw wounds over large areas of the body. Chronic ear infections are another common symptom. Occasionally dogs will have respiratory symptoms such as coughing, sneezing, or a nasal or ocular discharge. Food allergies may produce, in addition to skin irritations, vomiting and/or diarrhea. Symptoms can extend to include epileptiform seizures, and many holistic vets feel that allergies can ultimately result in chronic diseases such as arthritis, asthma, chronic urinary tract infections, inflammatory bowel disease, etc.

Interestingly, whereas dogs typically have itchy skin symptoms, a human allergic response usually produces respiratory symptoms. An estimated 10 percent of the human population may be allergic to animals (the rate for being allergic to cats is about twice as high as for dogs); a higher rate of 20 to 30 percent of individuals with asthma have pet allergies.

Immune system run amok

It has been estimated that more than 70 percent of all skin conditions in dogs are allergy-related, but every allergic patient presents a unique diagnostic challenge, and merely deciding which

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WHAT YOU CAN DO . . .

- **Flea bites are the number one cause of allergy in dogs. Commit to a thorough integrated pest management program for the life of your dog.**
- **Utilize every immune system-balancing protocol you can: improved diet and gut health; stress-reduction; acupuncture or chiropractic; etc.**
- **Keep trying. You'll need persistence to finally identify the allergen and remove it from your dog's environment, and to improve his immune response.**



Allergy can wear you out. This Springer Spaniel had been released to a shelter because his elderly owner could not afford further veterinary treatment of his severe, chronic allergies, which, as in many cases, worsened as he aged.

diagnostic tests should be run can be the most challenging of all our decisions. The following suggestions will help you determine which of the myriad causes might be responsible for your dog's allergies. From this information, you and your holistic veterinarian can determine the best therapeutic action(s) to take.

In a nutshell, allergy is the result of an immune system that has, for one reason or another, turned against the self. Sometimes, this reaction seems instantaneous, as when a dog receives a food that contains something to which he is allergic, and he breaks out almost immediately with rashy, itchy skin. But frequently, allergies may become made evident in your dog only after "gestating" for a long period, as long as four years or more. It can thus be almost impossible to pinpoint the exact cause that has instigated the symptoms.

We know there is a genetically derived propensity for developing allergies, but of

course, there's not much you can do about this after the fact, after your dog's allergies have already begun to surface. About all we can do is to support breeders who select individuals for immune competence, Zheng Chi vigor, healthy vital force, or for any of the health-giving attributes necessary for long-term, holistic well-being.

First steps

Make fleas flee. Most studies indicate that fleas are the number one cause of contact dermatitis in the canine species. So, it makes sense to look for fleas first, and if they are present, to use a low-toxic way to lower their numbers in the environment – in as natural a way as is possible. (See “Eliminate Fleas Without Poisons,” WDJ March 2002.)

However, if your dog is *highly* allergic to fleas, you may not have the luxury of taking your time to reduce flea populations. In these cases, a careful, limited use of the highly effective (and sometimes dangerous) “spot-on” pesticides may be necessary to quickly eliminate the flea population. This can give you time to improve his overall health and ability to withstand an occasional flea bite. Of course, a blind and sole reliance on pesticides is not recommended (see “Are Spot-On Flea Killers Safe?” February 2002).

Treat skin lesions. A holistic approach to allergies understands that external, skin symptoms are merely an outer manifestation of something going wrong inside. This is contrary to the conventional Western medicine way of thinking in which, often, only the symptoms are attacked, with little or no concern for the underlying cause.

That said, you must tend to the skin lesions, possibly with topical medications and/or soothing baths, as you work your way through the diagnostic and medical challenges of the allergic case. My favorite topical medicine for almost any skin lesion is to apply a spritz made from a tea brewed from calendula flowers (*Calendula officinalis*), several times a day, directly to the lesion. Other herbs such as chamomile (*Matricaria chamomilla* or *Anthemus nobile*), yarrow (*Achillea millefolium*), lavender (*Lavendula officinalis*), and mullein (*Verbascum thapsus*) may also be added to the herbal brew.

In every case of allergy, I initiate **immediate treatment of the dog's gastrointestinal system.** As we heal the gut, we in turn enhance the immune system – recognizing that a good portion of the immune system is located in the gut wall. A



A powerful vacuum is your best ally in the war on fleas. Vacuum frequently to remove flea eggs and larvae, especially near and under dog beds.

balanced immune system helps the dog deal naturally with any allergen that may be causing allergic reactions, whether this allergen is contact (skin-induced), inhalant (respiratory induced), or gut induced (food allergy). It's been my experience that if we can get the immune system balanced, most, if not all allergies, tend to go away.

Further, though I have not seen any studies that confirm this, experience has proven to me (and many other veterinarians) that some animals are allergic to the preservatives, artificial flavors, and/or artificial colorings found in some commercial dog foods. Oftentimes a simple upgrade to a higher quality diet without artificial ingredients eliminates the allergies.

I treat this “gut-check” step much as I would a confirmed case of Inflammatory Bowel Disease. Here's where your holistic practitioner can help devise a protocol that is definitive for your dog. My general approach is to detoxify first, probably with a mild herbal laxative such as aloe (*Aloe vera*), or senna (*Cassia spp.*). Then I add herbal liver helpers such as dandelion root (*Taraxacum officinale*), and milk thistle seeds (*Silybum marianum*). I'll also try to return the gut to a normal flora by adding beneficial bugs (Lactobacillus and other so-called probiotics) and increasing the dietary fiber.

As I am working with the gut, I will try to enhance a balanced immune system using herbs such as echinacea (*Echinacea spp.*) or Siberian ginseng (*Eleutherococcus senticosus*). Immune enhancing supplements including vitamins C and A and zinc may also be helpful.

Essential fatty acids (EFAs) are a group of chemicals found in some foods, and some of them can be converted into **beneficial prostaglandins.** At the top of the **beneficial** list are the Omega-3 EFAs found in flax oil and deep sea fish such as salmon, had-

dock, and cod, and gamma-linolenic acid (GLA), found in evening primrose, borage, and black currant seed oil. A combination of the Omega-3s and GLA seems to have the most potent effect.

A natural anti-inflammatory or cortisone-like herb such as licorice root (*Glycyrriza glabra*) may enhance the adrenal gland and also take some of the itch away.

Many of the holistic vets I know have found that an addition of some raw meat to the diet often alleviates the symptoms. Interestingly, in what may seem to be a paradoxical finding, I've had several animals who tested as allergic to a specific meat eliminate their allergies when we've added that particular meat (raw) to the diet. Note that these have all been animals that were treated beforehand to enhance their gut immunity, with the above inflammatory bowel protocol.

Realize that in this protocol we are simply upgrading the diet and adding anti-inflammatory and immune-enhancing nutrients. This is *not* a “food elimination” test for food allergies – a test that we might consider down the road, if these first steps don't seem to work. A true food elimination diet is more complex than this and will take at least two months of a strict dietary regime before we'll have a diagnostic answer. (See sidebar, next page.)

There is a certain amount of discipline involved with setting aside the obvious skin condition for a time while you change diets and add supplements, while you begin to think in terms of whole-body, long-term effects of whatever therapies you will use in the future. Not everyone has the time, patience, or forbearance to go through a holistic protocol for treating allergies, and it's a waste of time for everyone concerned to try to force a holistic protocol on someone who only wants a quick fix.

The value and limits of testing

If we don't have much luck alleviating symptoms after we've eliminated the fleas and changed the diet, then we are confronted with further challenges.

A dog (or any animal) may become allergic to almost any substance that exists in the real world. Furthermore, there are many diseases – external parasites, fungal or bacterial infections, hormonal conditions (hypothyroidism in particular), to name just a few – that create very similar symptoms to those caused by allergies.

The challenge is to figure out which substance, bug, or agent is creating the allergic

response – and we may not be able to determine that substance. Not ever. Or we may be lucky and find a diagnostic test that elucidates the one cause of the allergy, and all we have to do is either eliminate this one cause from the dog’s environment or create an inner environment whereby he can counter the cause.

Using the Western medicine approach, we might decide that a complete blood count and blood chemistry would narrow our list of possible causes. A thyroid panel might also be helpful, but remember that animals will often test low for thyroxin (T-4) when-

ever they are sick (as with allergies). So, a low T-4 may only indicate an animal suffering from allergies; not an animal that is hypothyroid.

Oftentimes these tests are more helpful for eliminating potential causes than they are for creating a specific diagnosis. And my usual caveat for testing definitely applies here: “Only do those diagnostic tests that, depending on their outcome, *will change your treatment protocol*. To do otherwise is a waste of time and money.”

There are two basic types of allergy testing for specific causes: skin and blood

testing. The skin test injects small amounts of potential antigens into the skin, and the practitioner looks for an excess reaction around the injection site – indicating a possible allergy to the injected substance. Various blood tests, such as the RAST (radioallergosorbent) and ELISA (enzyme-linked immunosorbent assay) tests, check for antigen-induced antibodies in the dog’s blood. If we can identify a specific allergen from the testing, we can then desensitize the patient by injecting small doses of the allergen over a period of time – often extending over several years.

Food Elimination Protocol

Many people think that a “food elimination” trial is when you switch your dog to a product that doesn’t contain some of the ingredients that dogs are supposedly more frequently allergic to, such as wheat or soy. (The fact is, there are not any definitive studies that identify the “most common dietary allergens.”) Some food manufacturers bolster this misconception when they refer to their products as “anti-allergenic” or boast about their product’s lack of ingredients X, Y, and Z.

Actually, in a properly conducted “food elimination” trial, you eliminate practically all food, reducing your dog’s diet to nothing more than a single protein source (preferably a “novel” protein – one he has never had before, such as buffalo, rabbit, kangaroo, etc.) and a single carbohydrate; again, it’s preferable to use a food he’s never had before, such as quinoa or amaranth. For a number of weeks, you feed your dog this stripped-down diet and NOTHING but this diet – no treats, snacks, scraps, or anything else that’s not those two ingredients, except, perhaps, a vitamin/mineral supplement. You do this under the supervision of your veterinarian, who will monitor your dog’s health on this restricted diet, and help you evaluate your dog’s reaction (or lack thereof) to the new diet.

In the best case scenario, in two or three weeks, your dog’s symptoms of allergy begin to subside. He starts to sleep better. His hot spots heal, and then a little hair begins to grow back. You’ve found two foods he’s *not* allergic to (at least, not yet) – hurray! Then, you add one more ingredient to his diet, say, another protein. You wait a fortnight or more, and if his symptoms stay in remission, you can mark the newest ingredient down in your dog’s health diary as “safe.” In this extremely slow, careful way, you add one ingredient at a time, watching your dog continually for a recurrence of his allergic symptoms, which would implicate the most recent addition to his diet as the allergenic culprit. Simple, right?

Well, in theory. Because in the *worst* case scenario, it turns out that your dog is allergic to one of the first two (or both) ingredients you selected, and he does not improve at all on the highly restricted diet, and you have to select two *new* novel ingredients before you find something he’s not allergic to. And if this goes on for some time, he’s either **a**) unbeknownst to you, eating something that you’re not giving him, say, the cat’s food; or **b**) he’s allergic to something in his environment, not his diet.

In another complex (but common) scenario, it turns out that he’s allergic to half a dozen or more foods. Or, you find a commercial food that contains none of the ingredients he’s allergic to, and you feed him nothing but that product for the next three years . . . and then he develops an allergy to the protein in that food. So, while a true food elimination trial *can be* incredibly helpful and ultimately diagnostic, it might also be more costly, difficult to manage, or time-consuming than some owners can handle.

In this case, a modified and much less strict version can be used. One could try switching to a commercial food that contains as few ingredients as possible, especially if you are feeding a product that contains several different proteins and a bunch of carbohydrate sources, such as Natura’s Innova, which contains turkey, chicken, herring, cottage cheese, and egg, as well as barley, two kinds of rice, and potatoes.

Look for a food that contains protein and carbohydrate sources that your dog has not eaten before. Several manufacturers call the formulas that meet this description their “allergy foods” – but one should not be fooled into thinking that these foods are somehow anti-allergenic. Your dog *will* have an allergic reaction to a fish-and-potato “allergy” food if he’s allergic to fish and/or potatoes. However, there are some foods on the market that just happen to be comprised of a relatively few ingredients, such as Natura’s California Natural (mostly rice, with either lamb or chicken).

Another alternative is to seek out a food that contains none of the proteins or carbohydrates sources that your dog has had before. Years ago, my dog Rupert suffered with terrible allergies as I switched him from one food to another, and even a raw, home-prepared diet. By chance, after about two years of switching from food to food, I found a product that he could eat without itching. It happened to be a beef- and barley-based diet. I went back through all my notes, and to my horror, realized that all seven or eight diets I had fed him – including the raw food – contained chicken. This ultimately proved to be the one ingredient to which he was reactive.

This experience underlined to me the absolute necessity of maintaining a health journal for each dog, with changes of diet and symptoms noted regularly.

– Nancy Kerns

However, all of these tests have problems inherent in their design, and depending on their personal experiences with them, practitioners either “swear at” or “swear by” them. Part of the problem is that the tests are not very accurate; false positives and false negatives are common. Furthermore, and this may be an even worse problem, when we do determine what substance a dog is allergic to, we may conclude that we won’t be able to eliminate or reduce his exposure to the allergen anyway.

For example, say that tests indicate that your dog is allergic to house dust and the oak trees that grow naturally all around your neighborhood. To avoid all of this dog’s allergies, we’d have to sterilize the house and deforest the town – not practical solutions!

The pathway of treatments

Even the pathway we choose to take when we decide which medicine to use is not an easy or clear-cut choice. Whatever medical system we opt to use, we need to understand that each method has its way of looking at health and disease (its diagnostic and treatment paradigms) and its own set of advantages and disadvantages when treating allergies.

Conventional Western medicine’s paradigm is to confront the disease with bio-

chemical methods (think war metaphors) and to palliate the symptoms so the patient looks well on the surface. Western medicine’s most common therapy for allergies is to use either one of the glucocorticoids or an antihistamine. Glucocorticoids have a litany of adverse side effects (see “Use Corticosteroids With Caution,” WDJ July 2004), especially when used for prolonged periods, and antihistamines can adversely affect a number of body systems in many patients. On the other hand, both these drug categories are fast-acting and are powerful at palliating the itchy skin symptoms.

There has been a recent spate of **newer, non-steroidal drugs** on the market. Most of these are simply another way to shut down the immune system’s overreaction. The problem is, of course, that no matter how we do it, when we shut down the immune system (rather than attempting to balance or enhance its ability as we do with alternative medicines), we have opened the door to infections and other complications of a nonfunctioning immune system.

Atopica (cyclosporine), a drug sold by Novartis, is an interesting example. Its package insert lists the following adverse reactions: vomiting (30.9 percent); diarrhea (20 percent); persistent otitis externa (6.8

percent); urinary tract infection (3.8 percent); gingival hyperplasia (2.3 percent); and lymphadenopathy (2.3 percent). Contraindications include “dogs with a history of malignant neoplasia” (hmm), and according to the insert: “killed vaccines are recommended for dogs receiving Atopica because the impact of cyclosporine on the immune response to modified live vaccines is unknown . . .” (double hmm).

Way back in the 1980s, cyclosporine was used as immunosuppressive therapy to eliminate organ rejection during organ transplantation. Its mechanism of action seems to be to suppress the activation of CD4 Helper T (lymphocyte) cells – that is, it has a mechanism of action different from the glucocorticoids, but with basically the same result: immunosuppression.

Then there are the alternative and complementary pathways.

Homeopathy works with the patient’s inner vital force, to enhance the ability to dispel any disease, including allergies. Homeopathic medicine is typically slow to work, and (at least in my experience when treating allergies) it is critical to find the specifically appropriate remedy that matches the totality of symptoms (“classical homeopathy”) – a process that can take many months.

General Tips for Navigating a Maze (Including the “Maze of Allergies”)

As we walk through the metaphoric maze of allergies, each turn – every diagnostic challenge and each selection of medicines or methods to use at the time – offers a choice that must be made. Each choice either leads to the way out of the maze (the cure), or down false pathways into blind alleys where we can get lost forever. The only way we will ever know is to try the pathway and see where it takes us.

As you walk the maze of allergy diagnosis and cure with your dog, keep the following labyrinth-solving strategies in mind.

■ **Every maze is different.** This is what makes maze-walking such an adventure. But when the maze is your dog’s allergic condition, the challenge of finding the correct healing protocol for your dog can become frustrating and downright discouraging.

■ **Pathways often defy logic.** In a maze you may need to initially go “left” when you know the ultimate way out is to the “right” side of the maze. In therapeutic terms, this means that we may need to try a medicine or method that doesn’t seem to make sense in order to get on the right pathway to healing.

■ **In or out?** Every choice you make has the potential of taking you deeper into the maze – or the pathway you’ve selected may be the way out. And since each turn of the maze is a blind one,

you may not know which way you are heading until you finally (we hope) see the light at the outside of the maze.

■ **Don’t go in circles.** Occasionally, you may need to re-trace your steps and your decisions. But, unless you want to become totally confused and frustrated, don’t continue going round and round in the same place, making the same decisions/mistakes.

■ **Don’t panic.** Remember that, while the therapeutic pathway you have chosen may seem to be taking you deeper and deeper into the maze, it may also be the correct pathway out. You’ll never know until you walk it to the end of the pathway it has created.

■ **Look for and listen to subtle clues.** I can’t tell you the number of times an animal’s caretaker has suggested a medicine that I would never have thought of, or one that I had no way of thinking would ever work on any disease. Or the number of times an animal’s caretaker has kindly suggested that she did not think what we were doing was working, and that maybe we should try something else. I hate to admit it, but if these “suggestions” have come from the heart, from subtle clues the caretaker was somehow privy to, then they often lead us in the right direction. Bottom line: Listen to your heart.

Homeopathic remedies may cause aggravations, and unfortunately the aggravations often take on the appearance of a recurrence of the skin symptoms. It can be difficult to differentiate between a homeopathic aggravation (a good sign) and a worsening of the condition. Homeopathic cures are typically whole-body and long-lasting, although many of my patients have needed to re-dose their remedy every few months or so.

Acupuncture works by balancing the patient's *chi*. In the case of allergies, the *chi* is overly active and needs to be calmed.



Chiropractic can sometimes stop the allergic response in its tracks.

“Zheng chi,” as the corollary to the immune system, is also enhanced.

In my experience, acupuncture almost always takes at least four or five treatments before we can determine its effectiveness, and the total number of treatments may reach a dozen or more. Most of my allergy patients need to return for follow-up acupuncture treatments on a periodic basis, usually a few times a year.

Although there are times when a simple **herbal** remedy is exactly what an allergic patient needs, I often find herbal remedies to be very mild in action and slow to work. I find them most helpful in enhancing and balancing specific organ systems that are under duress from the allergic condition.

I've seen many cases of localized skin lesions that have responded favorably and rapidly to **chiropractic**. Presumably, when a vertebra is out of alignment, the irritation to the associated nerve endings sends a sensation to the skin area that the dog interprets as, “Dang, that itches!” And so he scratches and bites until the chiropractic treatment readjusts the vertebral alignment.

There are a number of other therapies that occasionally surprise me with their effectiveness, especially **flower essences**,

which work to balance the emotions, and **aromatherapy**, which works at a subtle inner-brain level. There are several methods that utilize various forms of **applied kinesiology** as an aid to both diagnosis and treatment. (Applied kinesiology tests the body's reaction to a substance to determine if the subject is allergic to it, and it can also be used to “test” for the expected effectiveness of treatment preparations.)

Perhaps the most important concept to be clear with here is that Western medicine's way of diagnosis (and its philosophy of treatment) is very different from alternative medicine's methods. When a Western-trained practitioner sees an allergic animal, he immediately visualizes the biochemical symbols that are running amok, and his plan of attack is to use chemicals to block the out-of-control biochemical reactions.

An acupuncturist, on the other hand, might see an allergic response as an imbalance of energy or *chi*, specifically “Zheng chi” or “Righteous chi,” the Traditional Chinese Medicine correlate to the immune system.

Part of the acupuncturist's therapeutic approach, then, will be to enhance the Zheng chi, the life force that maintains homeodynamic balance and produces optimal health.

Treatment summary

My general treatment protocol for allergies, then, would look something like this:

- Reduce the flea populations on and around the dog.
- Reduce the potential for food allergies by improving the quality of the food, and at the same time . . .
- Enhance the immune system with high-quality food and nutritional supplements.
- Don't challenge the immune system excessively – with any vaccines that are less than absolutely necessary, for example.
- Use natural anti-inflammatory herbs and supplements.
- Consider acupuncture or homeopathy for chronic and/or severe cases (**NOTE:** I've often been disappointed when using these two *in combination* for treating allergies).
- Reduce environmental causes of allergy – airborne smoke and dust particles, for

example. Air quality is important in preventing the passage of allergens through the air. If your dog (or anyone else in the family) has allergies, consider using a quality household air filter.

■ Whenever possible, use methods that enhance the animal's innate ability to balance its own immune system and use methods that are the most natural and have the least potential for toxicity. However . . .

■ If early therapeutic attempts are not productive, consider testing for specific allergens (using skin or blood tests or a food elimination diet) if other methods do not seem to be working.

■ There may come a time when you may need to resort to medicines we know to be toxic and/or medicines that shut down the immune system rather than helping to balance it. Only you can decide when your dog and even you cannot take any more itching and scratching, and the loss of hair, skin, weight, sleep, and/or sanity that often accompanies severe allergy.

It has been said that sometimes, along our journey to wellness, we need to see and feel how it looks and feels to be well, so we can try to get back to this place. Sometimes I get the feeling that dogs affected with allergies – after perhaps months of itching and scratching, of evident pain and sleep loss – have forgotten how it feels to be well. With these cases, I think it is important to let them experience wellness, however briefly, even if it means that we may have to resort to types of medications such as glucocorticoids and/or antihistamines that I would ultimately like to avoid.

I think we need to approach allergies (and other chronic diseases) with an understanding that the treatment protocol we choose will likely require time, effort, and discipline; that we may never be able to come up with a treatment regime using a linear-logical approach; and that, in the end, we may not truly find our way out of the maze of allergies, no matter what we try. 🐾

Dr. Randy Kidd earned his DVM degree from Ohio State University and his Ph.D. 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).

Lone Dog in the National Parks

A courageous retiree shows dog owners and NPS personnel alike how pack dogs can be used to preserve disabled access to wilderness lands.

BY JANE COX

“Is he something special, or just a mutt?” the man asked, as I passed him on the trail. Trigger, my 65-pound Australian Shepherd mix stood beside me with tail wagging, ready, as always, to meet this inquisitive stranger with the blunt question of parentage.

As one of the first people to hike in a national park with a service dog, I was very aware that Trigger and I had the responsibility to set a good example and to educate people about service dogs in national parks. Often when we stepped off the trail for a break or to let people pass, we got questions and I always took the time to answer them as accurately as possible. A lot of questions were about service dogs:

- What kind of service does he perform? (This, as he stands there wearing a pack!)
- Did he go to service dog school?
- Where do you *get* a pack dog?

While many dogs are trained by professionals and there are schools for the most common functions that dogs perform (such as guide and sound alert), many more dogs are trained by owners to perform the services necessary to meet their own specific needs. When I adopted Trigger I didn't know he was to become my service/pack dog. But as our relationship developed and his training progressed, I also learned that I qualified under the Americans With Disabilities Act to declare him as my service/pack dog. This made it possible for me to take him into national parks and other places where dogs as pets are not allowed.

Defining disabled

If you hike with a service dog, one personal question that you should be prepared to deal with is obvious: Why do you need a service dog? The details and nature of your response may depend on who is asking and why.

Many people do not understand how an individual can hike five or six miles over mountainous terrain and be disabled. When I meet people in high mountain camps or on the trail, I tell them about the ADA, which mandates a much more user-friendly (though relatively untested) definition of disability than that of the federal government for a Social Security disability grant. The ADA uses the terms “restriction,” “limitation,” and “impairment” all interchangeably with the word “disabled.”

I have hiked and backpacked all my life, but I am now substantially limited in what I can carry. The purpose of the ADA is to ensure that people with limitations are not denied full and equal enjoyment of the “goods, services, facilities, privileges,



Using all positive methods, author Jane Cox trained her pack and service dog, Trigger, for basic good manners and packing. Trigger has also been tested and approved for participation in the Delta Society's Pet Partner Program.

advantages, or accommodations” offered by a place of public service. While the ADA does not require you to show proof of your restriction, I inform park superintendents that I qualify under the ADA for pack-carrying assistance, so they can notify their rangers of this policy exception.

Enhancing the experience

If you are an experienced outdoor person and you have a sturdy, well-behaved dog, he has the potential to be of substantial help to you. I used to backpack, but now I am retired, and only able to continue hiking with pack-carrying assistance. Now I like to hike between established camps where meals and primitive shelter are provided.

The Whole Dog Journal™



WHAT YOU CAN DO . . .

- Obtain a copy of the Americans With Disabilities Act, and consult with your doctor to determine whether you might qualify.
- Select a good candidate for dog packing: a sizeable, strong, confident, adventurous dog.
- Use positive training techniques and oodles of practice and desensitization to prepare your dog for every trail experience you might encounter.
- Never take a poorly prepared or “borderline” dog into areas where dogs are not generally allowed; this makes it more difficult for dogs in the future.

Well before each trip, Trigger and I start to condition ourselves to carry more weight and hike farther. The maximum pack weight recommended for a dog is 25 percent of its body weight, but that doesn't mean that every dog will carry that much. Trigger weighs a slender 65 to 70 pounds, but he doesn't want to carry 15 pounds. He willingly carries about 13 pounds after several months of gradual conditioning. Most of the time, Trigger only carries about seven or eight pounds on a day trip in the winter, and less in the summer. Trigger carries all the water we drink in a day, so his load lightens as we travel.

Some people think that dogs should be banned from public land because they may jump on people, bark at or chase animals, and are generally disruptive or incompatible with nature. I have to agree that I have seen my share of dogs who are out of bounds and out of control, but contrary to what people may think, a well-trained dog is neither disruptive nor incompatible with nature. Animals aren't any more afraid of a dog than they are of a person, unless they are being stalked or chased.

Trail training would not be complete without careful desensitization to lots of distractions – people, other dogs, bicycles, horses, and mules. I attended canine agility meets and horse shows at fairgrounds, to give him exposure and training to reinforce his steady behavior around livestock and in distracting environments.

Early in his training, when Trigger was tempted to chase a squirrel, I used a long distance "sit" in place rather than a recall to keep him from chasing anything that he saw. Better to use an immobilizing command, such as "sit" or "down" than an active behavior such as "come!" when his predatory reflexes are tempted. I used a dragline for backup to have him sit in place. Then he could be rewarded for a steady response.

One afternoon in the campground on the North Rim of the Grand Canyon Trigger appeared to be asleep. Then all of a sudden he was on his feet with his eyes riveted on a tree. Clinging to the opposite side of the tree was a Kaibab squirrel peeking around the tree trunk at him.

The squirrel could certainly have run away or climbed the tree if he wanted to. Trigger could have

barked and scared him away. But it was as if time was suspended as two very alert and curious animals contemplated each other. The squirrel was focusing all of his attention on Trigger; and I had the extended opportunity to observe a friendly natural encounter. Trigger is always pointing things out to me, and it's fun to see nature through the eyes of a dog.

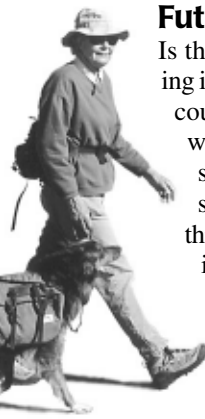
There was one animal that we were instructed to avoid: the pack mule.

Over the years, mules have become a part of the wilderness experience. Visitors have come to depend on them as a means of transportation, and park staff depend on them as beasts of burden. They are essential for getting food and supplies up to the high camps. The mules are steady and dependable for what they do. The problem is, most of them have never seen dogs.

When hiking in the Grand Canyon, I was instructed to get Trigger off the trail and hide him when I saw mules coming. Once, when we saw the mules coming there was no place for both of us to get off the trail. The only possible place for him to go was down into a steep ravine between two legs of a tight switchback. I couldn't go down there with him, but I tied his leash to his pack and sent him down, putting him on a "down stay" with a hand signal. The mules, not more than 10 feet above, surrounded him as they made their way around the switchback. He didn't move until I called him up.



Cox adopted Trigger from a shelter when he was about seven weeks old. She spent years on training and exposing him to the backcountry, setting him up for success and confidence.



Future of dog packing

Is there a future for dog packing in the national parks? There could be, if people traveling with dogs in national parks show consideration and respect for other visitors. At this time, only dogs performing a needed function to compensate for a physical (or mental) limitation of its handler can accompany its person on trails in national parks.

If there were an organization to promote dog packing, could the members reach consensus on what they want? What is their part of the bargain? What kind of privileges would they like to earn? Hiking with a dog (as a pet) in a national park should definitely be an earned privilege, not a right. Dog owners need to take more responsibility for their dogs' supervision and control, especially in high-use areas.

A lot of people would like to see some kind of special permit for those of us who hike with our dogs. But even so, dog packing under the ADA is a very controversial and contentious subject. Understandably, there is a serious concern that the open nature of the ADA will encourage abuse within it. Along with every right, there is the responsibility to act with respect and consideration for those we meet, and for those who are likely to be most impacted by one's actions.

If dog owners want to access the backcountry of national parks, we have to actively educate ourselves and others about canine trail manners, and regulate dog packing so as to minimize the risk of losing what freedoms we still have. Many other users of public lands have organizations to promote their interests. Dog owners do not have any real national voice, but there are a lot of dog owners who would like to be considered as fair share users of public lands. 🐾

Jane Cox is author of Dog Packing in National Parks: How a Pack Dog Became a Service Dog. See "Resources," page 24, for purchase information.



Cox is retired, and lives in Central Point, Oregon.

Collar, Tag, and 'Chip

No, the microchipping system isn't perfect yet . . . Get one anyway.

BY NANCY KERNS

We've all heard at least one tragic story involving a lost dog and a disconsolate owner. We've all seen a lost dog scared witless, running down a street with that classic lost dog expression, almost blind with fear.

A lost dog's chances of finding his way back to his concerned owner are vastly improved if he's wearing a collar and identification. People may try harder to catch a stray dog who is wearing a collar and tags; they may feel he's less likely to be abandoned and more likely to be lost. A collar gives a samaritan something to reach for. And, obviously, the identification makes it ridiculously easy for the owner to be immediately notified and summoned to reclaim his errant friend.

Sadly, there are thousands of dogs lost each year who are *not* wearing a collar and ID, and too many of them are unable to ever return to their homes. The American Humane Association estimates that only about 15 percent of lost dogs and 2 percent of lost

cats ever find their way back from shelters to their original owners. Implanted microchips can improve that sad statistic.

Theoretically near-perfect

A microchip is a tiny transponder, coded to display a unique identification number capable of being read by a hand-held scanner. The transponder is embedded in a sealed glass or bioplastic tube, often described as the size of a grain of rice – long-grain rice, anyway. (The tubes are 2mm x 1mm.)

The chip does not contain a battery or any other technology that can wear out; it draws power from and responds only to a scanner held fairly close to the dog and tuned to the correct frequency. The rest of the time, it is completely inert. The chips are implanted under a dog's skin above his shoulders, with a pre-loaded, sterile syringe and a large-gauge needle. No anesthetic is required, and dogs generally react little more than to a regular vaccination injection.

The owner of the implanted dog then registers the chip with the manufacturer, linking her name and contact information, including numbers for the dog's veterinarian and an alternate contact person.

Shelters scan every dog brought to their facilities. The scanner reads the chip, a call to the chip maker's registry locates the owner's name and contact information, and within minutes, a call is placed and the owner receives the joyous news, "We have your dog."

Reality bites, sometimes

That's exactly the way the system works – sometimes. The companies that provide microchips and chipping services toss around high numbers to promote the technology; for example, one company reports



Microchip implanting services are increasingly easy to find and afford. Some shelters offer free chipping on special days; others chip every adopted dog.

The Whole  Dog Journal™

WHAT YOU CAN DO . . .

- **Keep a collar with current identification on your dog at all times – no exceptions.**
- **When you travel, or your dog is in anyone else's care, add a temporary ID to his collar with the caretaker's contact info.**
- **Have an identifying microchip implanted in your dog. If, for some reason, your dog does not have his collar on when he is lost, this will increase the odds he is identified and returned.**
- **Register the microchip and your contact information as soon as possible. Keep your contact info current!**

more than 200,000 pets reunited with their owners so far. These numbers are cause for celebration, and definitely a reason to embrace and support the practice.

Unfortunately, there are some significant problems that prevent the concept from working perfectly all the time:

- **Competing microchip manufacturers have created and promoted incompatible technology – scanners that can't read every chip, and chips that can be read only by certain scanners.**
- **Not all shelters have scanners. (And so it follows that not all shelters have *all* scanners.)**
- **Not all shelters that have scanners scan**

every dog who gets brought in. Overworked shelter staff may be ill-equipped or disinclined to scan a dog that is defensive, or seems aggressive or dangerous.

■ Scanners can sometimes fail to read or even detect the presence of a compatible chip, whether due to a technology malfunction or operator error.

■ In the early days of microchipping, the implants sometimes “migrated,” or moved to a place where they couldn’t be detected or weren’t detected because the person scanning the dog didn’t expect the chip’s location to be so far from the norm.

This is actually a *former* problem. Manu-

facturers say chips now are made with a special coating that, once in contact with body fluids and subcutaneous tissue, helps the body to form a layer of connective tissue around the chip, holding it in place.

■ Owners may fail to register their dog’s microchip, or fail to update the registry with current information after they move.

■ There are several competing chip registries, which can potentially delay notification of an owner.

Still worthwhile as a back-up

Despite all the potential problems, the fact remains that thousands upon thousands of

dogs *do* get identified and recovered, thanks to their microchip implants. There have been reports in the media of dogs and cats who were found hundreds and even thousands of miles away from their original owners. There have been pets who were identified and brought back to their original owners as much as a decade after being lost!

These reunions, between collarless, tagless pets and their owners, would simply not be possible without microchip technology, imperfect as it is.

And, fortunately, there are a number of things that a dog owner can do to reduce the number of potential problems that could otherwise hinder the effectiveness of the microchip identification system.

A Brief History of the Chip Wars

The first thing consumers need to know when considering getting a microchip implant in their dog is where they are situated, geographically, in the competitive chip wars. And to learn about that, as with all wars, they need to learn a little history.

When microchip technology was first utilized for pet identification, several companies raced to claim their share of the emerging market. They deliberately developed products (the chips and the scanners that read them) that were incompatible with those of their competitors. Dogs and dog owners were the losers in this war. While the technology was capable of saving lives, the competition compromised the microchips’ promise.

For many years, the animal protection community pleaded with the chip makers to create universal products that were completely compatible with their competitors’ products. Until this was accomplished, they warned, shelter directors could not in good conscience use and recommend the technology.

In 1996, finally responding to frustrated consumers, the major chip manufacturers began cooperating. Two companies – Schering-Plough and AVID – emerged from the war as the sole patent holders on all 125-kHz technology in this sector, effectively controlling the U.S. market for chips and scanners. They enabled their scanners to read their competitor’s chips, and for a few years, all was well, and animal protection groups and consumers alike began utilizing microchips in greater numbers.

THE GENIE IS OUT OF THE BOTTLE

In retrospect, it was the calm before the storm. Frustrated by the 125-kHz patents that prevented them from entering a promising market at a competitive price, in February 2004, at least two chip manufacturers introduced 134.2-kHz chips to the U.S. market. The 125-kHz scanners in shelters and vet offices all over the country cannot read these chips. Chaos was reintroduced to the U.S. microchip market.

However, the move wasn’t condemned, as one might have guessed, by animal protection advocates. In fact, a number of animal advocacy groups – including the American Humane Association, American Animal Hospital Association, American Veterinary Medical Association, and American Society for the

Prevention of Cruelty to Animals – are actually clamoring for the industry to begin moving toward eventual sole use of the 134.2-kHz chips.

You see, the U.S. is one of the few countries that uses 125-kHz chips and scanners. Much of the rest of the world’s identification microchips use the non-proprietary 134.2-kHz frequency recommended by the International Organization for Standardization (ISO). Advocates of the ISO standards argue that chips and scanners using non-proprietary, standardized, compatible technology will stimulate competition in the market and drive prices down. Because ISO scanners can read all unencrypted microchips, regardless of their frequency, their use would also guarantee that any pet with a chip would be identified by any scanner anywhere in the world. (AVID encrypts its chips, so they cannot be read, only detected, by ISO scanners.)

There has already been one known casualty of the rejoined battle for market share. A dog in Virginia was implanted with an ISO chip shortly after they were introduced in the U.S. In April, he was picked up as a stray and taken to a local shelter. Unfortunately, the chip was not detected by shelter staff, who scanned the dog with a 125-kHz scanner, but failed to use the new ISO scanner they had received for free from the maker of the ISO chips. The dog was euthanized after the shelter had held him for 10 days, four days past the state’s mandatory holding time – the same day the dog’s owner finally called the shelter with a description of her dog. She hadn’t called earlier, apparently certain if he had been in the shelter, his chip would have been read and she would have been contacted. Lots of sad lessons learned there.

Advocates of the ISO technology are begging U.S. chip makers to distribute scanners with “forward and backward” ability – ones that can read “forward” (ISO) and “backward” (125-kHz) chips. This would support the existing network of microchip-implanting services and pets that are already chipped, while simultaneously moving toward a global standard that would help more pets.

Until the war is settled, microchip identification will continue to be the second best tool dog owners have at their disposal to be reunited with their lost dogs.

What you must do

First, keep a collar and current ID on your dog. Then, because bizarre things happen, have your dog microchipped, in case he becomes lost and separated from his collar.

Before you have a microchip implanted in your dog, do some research in your community. Call all the veterinary hospitals in your area and ask if they implant microchips, and if so, which type? Then call every animal shelter in your area and ask them the same questions. Don't settle for ambiguous answers; ask to be transferred to one of the staff members who actually scans incoming pets. Find out whether they check for 125- and/or 134.2-kHz chips (see "A Brief History of the Chip Wars," previous page), and if so, how? Do they use more than one scanner? Or do they have a forward and backward scanner?

If you are extremely fortunate, the animal shelters in your community have and reliably use either a forward and backward scanner, or both types of scanners. (We suggest a letter-writing campaign to urge your shelter to obtain and use an ISO scanner that can read or at least detect all chips.) The next best scenario is the community in which only one type of chip is sold and its corresponding scanner is used reliably by all the area animal shelters.

If your local shelters do not regularly scan for microchips, or do not scan for *all* the chips that are distributed by vets, clinics, and other shelters in your area – consider having your dog tattooed in addition to or instead of microchipping. Two lines of defense are always better than one. 🐾

Microchip Registration Providers

The point of having your dog microchipped is first, to make sure that he is identified as an *owned*, lost dog, and to link his identity to you, at your current address and phone number, as quickly as possible. The best way to do this is to register with the chip's recommended registry and to keep the information current. It's conceivable that the manufacturer could find you even if you didn't register the chip, but if your contact information changes from the time that you implanted the dog or adopted an implanted dog, the trail will go cold and the exercise will have been futile. Register, contact the registry every time you move, and contact it annually just to make sure its database is up-to-date and accurate.

The following are the largest, most prevalent registries in the U.S.

The **HomeAgain** Microchip Identification Program, administered by the AKC's Companion Animal Recovery (CAR) program, is the registry suggested for users of the microchips manufactured by Schering-Plough. CAR will register *any* chip or tattoo for a one-time fee of \$12.50 per pet; there is no fee for information changes. As of June 1, 2004, there are 2.38 million pets registered with CAR; about 13,000 have non-HomeAgain chips. For more information, see akccar.org or call (800) 252-7894.

PETtrac is the registry for animals with **AVID** microchips. There is a one-time fee of \$15 to register one animal's chip (of any type) or \$40 to register up to eight animals in the same household, and \$6 for changing registration information. PETtrac has about 1.94 million microchips in its registry. See avidid.com or call (800) 336-2843.

24PetWatch uses ISO microchips and offers *free* registration of their own *and* any company's microchips; there is no charge to change contact information. See 24petwatch.com or call (866) 597-2424.

Petlink.net is the registry for Crystal Tag ISO microchips, but they also register other chips and tattoos. There is a one-time registration fee of \$11.95, and no fee for changing or updating your contact information. See petlink.net or call (877) PET-LINK.

Thanks to VIP Petcare Services of Rohnert Park, CA, for letting us photograph a microchipping clinic. VIP offers mobile clinics all over Northern California. (800) 427-7973.

There's No Excuse for Not Having ID on Your Dog

People have numerous reasons for not having current ID on their dogs. We've heard every excuse in the book. But we have an answer for all of them.

EXCUSE: I can't stand hearing my dog's tags jingling.

SOLUTION: Get a tag cover, which encases the tags on the dog's collar. We like the Quiet Spot pet tag silencer. This neoprene and Velcro pouch encapsulates several tags securely, and helps keep tag lettering from wearing off. Available from itzadog.com, (303) 322-4114.

Alternatively, get one of the collars with your phone number stitched onto it. Available from many catalog sources, including The Dog's Outfitter, (800) 367-3647 and J-B Pet Supplies, (800) 526-0388.



EXCUSE: My dog's hair is very fine and becomes damaged when he wears a collar all the time.

SOLUTION: Try a silk-lined collar from Mrs. Bones, the most gorgeous we've ever seen: mrsbones.com or (877) 767-1308.

EXCUSE: I travel a lot and frequently board my dog.

SOLUTION: Jiffy Tags Instant Pet ID tags cost about 50 cents, and can be made on the spot. List your dog's caretaker's phone number, or list the phone number of your hotel. We suggest buying a dozen Jiffy Tags so you always have one on hand for a quick solution. From Animal Care Equipment, (909) 338-1791.



Touch Me, Touch Me Not

This program will make your dog safer to live with and easier to examine.

BY PAT MILLER

Last month, author Lexiann Grant discussed the benefits of touching for dogs and humans (“Lay Your Hands On Dogs”). I was graphically reminded of those benefits recently when our beloved 15-year-old Pomeranian, Dusty, succumbed to an ulcerated cornea and eventual rupture of his left eye. This is an extremely painful condition, and given his failing ability to use his hind legs, refusal to eat, and signs of obvious depression, we sadly opted for euthanasia.

We spent our last afternoon together sitting in the sun, on the grass lawn of our new farm in Maryland. As I stroked Dusty’s soft golden fur and massaged his limbs and frame, I could see the tension leave his small, frail body. His pain seemed to fade at my touching; he stretched out on the grass with a sigh, more relaxed than he had been since his eye ruptured three days earlier. I could feel my own tension lessen as well, as I savored what I knew were my last moments

with this gallant little boy who had shown me that small dogs could be every bit as big in heart and mind as their larger brothers.

I’m grateful that our dogs enjoy being touched, and that we can share the gifts that such healing contact offers. But not all dogs like – or even tolerate – being touched. Fortunately, a dog’s negative association with touching can often be changed through the use of counter-conditioning and desensitization (CC&D).

Classical v. operant conditioning

A negative reaction to being touched is usually a classically conditioned response. With classical conditioning, the environment acts on the dog. That is, the dog’s brain contains a pre-programmed message that says, “Touch is BAD!” – and when the dog feels your touch he reacts, without stopping to think. The negative message could be a result of harsh handling and punishment, pain



Not all dogs are comfortable being touched, but most can be taught to enjoy and crave human contact. This is a useful life skill for all dogs, helping them get along in human society comfortably. It can also be life-saving in a veterinary emergency.

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WHAT YOU CAN DO . . .

- **Make a commitment to work with your touch-sensitive dog to help him change his association with hands-on communication from negative to positive.**
- **Set aside at least one 15-minute period each day to implement a counter-conditioning and desensitization program.**
- **Keep a diary of your progress so you can document how successful you are with your CC&D program. Make special note of your dog’s “Where’s My Chicken?” (WMC?) moments.**
- **Give your dog – and yourself – a special treat each time you achieve a new WMC? milestone.**

from a prior injury, or simply a lack of adequate handling and socialization when he was a pup.

This is very different from operant conditioning, where the dog acts on the environment. For example, if you say, “Sit!” the dog thinks, “Ah, I know what that means – if I put my bottom on the ground I might get a cookie!” and so he *chooses* to sit in order to make a good thing happen. When your dog reacts to your touch with distaste, perhaps even aggression, he’s not *choosing* to react that way, it just happens, thanks to that pre-programmed message in his brain.

The most effective and successful way to change your dog’s response to your touch is through *counter-conditioning*, which reprograms the message at a low level of

stimulus that he can at least tolerate – perhaps briefly and softly touching his head. Then we use *desensitization* to help him accept the touching at gradually increasing levels of intensity – touching more of his body, or touching with more pressure, or for longer periods of time.

It's almost magical to watch an effective CC&D program in progress. Some behavior changes I've seen as a result of this kind of behavior modification have been nothing short of miraculous, such as one family's Chow mix and newly adopted Chow who wanted to tear each other to shreds, but became fast friends within three weeks when the owners implemented a CC&D program.

Reprogramming

Perhaps your dog will tolerate a light touch on the top of his head, and a gentle scratch under his chin, but he becomes very tense if you do more than that, and any efforts to touch his legs and feet or his hindquarters and tail elicit serious warnings about forthcoming aggression. You believe him, and wisely don't press the issue, but that means even simple but necessary procedures such as nail trimmings and baths are stressful and potentially dangerous.

The first step in your program is to have a complete and thorough veterinary exam, and an adjunct visit to a chiropractor if indicated. Pain is a huge contributor to aggression – if he's hurting, all the CC&D in the world won't change his opinion of being touched – *it hurts!*

Of course, if the whole point is that your dog doesn't tolerate being touched, how do you make him submit to a vet exam before you

work on the problem?

Unfortunately, it's a necessary evil, so spend a week (or a few weeks) acclimating your dog to a comfortable cloth muzzle. Lend muzzle-wearing a very positive association by pairing its presence and application with *wonderful* treats. Then muzzle him before the vet or vet tech begins to examine him, in order to keep everyone safe.

Ask your whether using a sedative would help make the experience less traumatic. You might also consider products such as herbal calming agents, Rescue Remedy, and DAP (Dog Appeasing Pheromones, sold as "Comfort Zone").

With a clean bill of health, you're ready to begin. You'll need a large supply of absolutely scrumptious treats – canned chicken, rinsed and drained, is my favorite for CC&D purposes; most dogs totally love it. Pick a comfortable spot on a bed that your dog loves, or lay down a cushion or a soft thick blanket for the two of you to sit on. Attach a leash to your dog's collar so you don't have to grab to keep him with you.

The sequence of the next part is very important. You will touch your dog's head *first*, very briefly – say for one second – then feed him a tiny bit of chicken. The touch must come first because you want him to understand that *the touch makes the chicken happen*. If you feed chicken first, then touch, he won't make that connection.

Keep repeating this step until your touch causes him to look at you with a smiling face as if he's saying, "Alright – you touched me. Yay! Where's My Chicken?" You want the "Where's My Chicken?" (WMC?) response

to happen reliably several times in a row before you proceed to the next step.

Good job! You've accomplished the first tiny step on a long road; he thinks being touched softly and briefly on the head is a wonderful thing. Now you must decide whether to stop the session – ending on a high note – or continue on because you both are having a wonderful time and don't want the session to end. If you're unsure how much longer he will work with you, it's better to stop sooner, while you're ahead, than to push it too far and suffer a setback.

If you proceed, the next step might be to touch him on the head, still very gently, but for two seconds. You may lose the WMC? response at first as he adjusts to the increased time, but it will probably return quickly. Continue to increase the time, very gradually, so you don't lose the progress you've made. As your touches get longer, feed him several treats in rapid succession *while* you are touching. Remember to stop the treats when the touch stops.

Be sure to end the session before one or both of you gets bored, tired, stressed, or frustrated. You can always do another session later that day or the next. If you sense that he's getting restless, stop the session, feed him a few extra tidbits for being a wonderful boy, and release him with an "All done!" cue. Next time, stop a little sooner – you don't even want him to *think* about getting restless.

Session #2 – Taking the next step

When you start up again with your next session, back up a little. If you ended with



A "Where's My Chicken?" expression tells you that your dog has made the link between a stimulus and an enjoyable reward. Make sure you elicit this response several times before increasing the duration or intensity of the stimulus.



Do NOT punish or yell at your dog if you push too far and elicit a bad reaction. Keep giving him the treats whether he's being "good" or not; this is conditioning, not training. Proceed more slowly, though, to elicit more positive responses.

five-second gentle touches on your dog's head, start with three-second touches. You'll be able to progress more quickly back up to five seconds, but be sure to start within his comfort level and warm up to the place where you ended.

When he has a positive association with gentle touching up to perhaps 10 seconds, you can increase the intensity of a different stimulus – the amount of pressure. Each time you raise the bar for a new stimulus, lower it for the others – in this case you might go back to two or three seconds, with a slightly stronger pressure when you touch. Work to get that positive “Where’s My Chicken?” response with the new amount of pressure at each length of time before you increase the time again.

When he’s responding happily to a moderate amount of touch pressure at 10-15 seconds, you can increase the intensity of the third stimulus in the touch package – the position of your hand. Up until now you’ve been touching him in his most accepting spot – the top of his head. Now you’re going to begin to move your hand to more sensitive places – again reducing the intensity of the other two stimuli – time and pressure.

Perhaps you’ll try ears first. Returning to a very gentle touch, stroke one ear for one to two seconds, then feed some chicken. Repeat this until you’re getting his WMC? response to the ear-stroking, then do the same with the other ear. Gradually increase the length of time you stroke each ear gently, and when you’re getting positive responses to 10-second ear stroking, it’s time to increase the pressure. Shorten your ear strokes back to one to three seconds, but stroke the ear a bit more firmly.

Remember to be very generous with your chicken bits, feeding a morsel or two every time you stroke the ear, and several morsels as the touches get longer. When he’s happy to have you stroke both ears firmly for 10-15 seconds or longer, you can move to a new spot.

Don’t forget to reduce the other stimuli each time you move to a new touching place. After the ears, you might run your hand down the back of his neck, gently and briefly. Treat! You should find that as you work toward various new spots around your dog’s legs and body, he’ll accept new touches more quickly in many places. Adjust your pace to his behavior. If he’s giving you WMC? responses very quickly, you can progress more rapidly in your program. If he seems slower to respond, you’re probably working on or near a very sensitive place,

and you need to slow the program down. He’ll tell you how slowly or quickly you can progress. Listen to him. Attempts to force him to accept your touching will backfire, big-time.

Sensitive places

Many dogs, even those who are comfortable being touched elsewhere, are tense about having their feet handled. Take extra care as you begin to move down his legs. A few extra days – or weeks – now will pay you jackpots in the long run, when you can finally clip his nails without a violent struggle. Spend lots of time massaging the areas where your dog has come to enjoy being touched, and occasionally work on the more sensitive spots. In addition to the chicken, soothing massage sends a very positive association to the message that you are reprogramming in his brain.

It’s critically important to avoid triggering the negative associations outside your CC&D sessions. If you forget about his sensitivities and grab him during a “real-life” moment you may set your program back. It won’t hurt to skip one or two nail-trimming sessions while you work to get him to accept foot-handling without a fight.

Make sure that others are aware of the importance of respecting your CC&D program too. There’s nothing like having a friend or family member think it’s funny to see your dog’s negative reaction when they play “grab your paws” – thereby undoing all the good work you’ve done. Grrrr! I’ve been known to banish human acquaintances from my household for less!

In his own time

How quickly you complete your CC&D program depends on several factors:

- Your dog’s age, and how long he has been displaying a negative response to being touched.
- The intensity of his negative association with touch.
- The cause of his sensitivity. Prior harsh handling is likely to be more difficult to overcome than lack of handling, since he has a negative association with the human presence as well as the sensitivity to touch itself.
- Status of physical contributors to the sensitivity. If your dog has a grass allergy that causes inflammation in his pads, for

example, your constant struggle to reduce the discomfort in his feet will slow your CC&D progress.

- Your commitment to implementing the program on a daily basis. Several short sessions a day are generally more effective than one long daily session.

- Your skill at reading your dog’s comfort level and moving the program forward at an appropriate pace without triggering negative reactions.

Success!

The success rate for touch CC&D programs is high. Unlike modification programs for things like dog reactivity, where it’s difficult to control all the variables, you can manage the factors of a touch modification program with relative ease. Chances are good that even if you don’t achieve 100 percent positive association with touching every part of your dog’s body, you can accomplish a positive response for much of it, with agreeable acceptance for the highly sensitive parts.

Just ask our three-year-old Scottish Terrier. When we found him as a stray in Chattanooga as a six-month-old pup, his feet were raw and bloody, he had sores and scabs all over his body from a generalized dermatitis, and his ears were badly infected, all from a severe grass allergy – not uncommon to Scotties. He could barely tolerate being brushed, treating those infected ears was a real challenge, and touching his sore paws was out of the question.

Today, although he’s still a little sensitive about his paws, he adores being touched elsewhere – there’s nothing he loves more than lying on my lap, stretched out flat on his back for tummy rubs, and having the rest of his body brushed and massaged. We’re still working on feet – it was 18 months before I could clip all his nails in one sitting – and his first instinct is to pull away when I touch them – but then he relaxes and enjoys a little foot massage as well.

And for me – there’s nothing like a Scotty body in my lap to help ease the tensions of a busy day, and soften the grief of losing a beloved companion. 🐾

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 contact information, see “Resources,” page 24.

Go With Glucosamine

This “nutraceutical” is best used early in life to prevent osteoarthritis.

BY LORIE LONG

My Border Terrier, Dash, and I have been enthusiastic agility partners for about four years. It’s difficult to imagine anything more fun than stepping up to the start line at an agility trial and getting ready to rocket around the course with her! Of course, my friends who work with their dogs in flyball, herding, freestyle, obedience, earthdog, lure coursing, hunting, search and rescue, and more, all feel the same way about their dog activity (or activities) of choice.

It can take years to train a dog and to prepare his body for the physical challenges of competition in these sports. Once he’s ready to compete, the goal becomes preservation of his fitness and soundness (physical and mental), so that you both can enjoy your activities for as long as possible. Preventing injury and, as much as possible, the breakdown of structural integrity that accompanies advancing age is a huge challenge.

In recent years, one nutritional supplement in particular has been embraced by

The Whole  Dog Journal™

WHAT YOU CAN DO . . .

- **Use a glucosamine supplement early in your dog’s life to prevent osteoarthritis.**
- **For lower-cost products, buy supplements that contain only glucosamine; the other ingredients in a combination product are what drives the price up.**
- **Compare the price of products using the cost of a daily dose; some are more concentrated than others, so you feed less on a daily basis.**



All athletic dogs, whether participants in competitive sports or just active participants in life, will benefit from joint protection years before problems might be expected.

competitive dog owners and veterinarians for its ability to meet that challenge. Glucosamine is the best known and most commonly used supplement for prevention of lameness due to osteoarthritis (a.k.a. degenerative joint disease) – a disorder of the joints characterized by progressive deterioration of the articular cartilage.

The joint’s the thing

For the active dog, mobility is all about the health of the cartilage that forms the protective cushion between a dog’s bones where they meet at the joint. Cartilage provides a spongy, watery pad where the shoulder, hip, knee, elbow, wrist, and other bones come together, acting as a shock absorber between the bones when they are in motion. Like a fluid pillow full of thick liquid wedged between the bones, cartilage consumes the force of the concussion generated during movement.

Cartilage does not have a blood supply; it relies on the motion of the joint to pump

nutritive liquid in and out, pulling needed nourishment into the tissue. With age, cartilage can become drier, thinner, and less effective at cushioning the bones in the joint.

Joint problems occur when the rate at which joint cartilage degrades exceeds the rate at which the dog’s body replenishes it. When the supply of cartilage is inadequate for the needs of the joint, bone rubs against bone, inflaming the bone itself and the surrounding nerves, and producing pain and lack of mobility.

Cartilage is a very dynamic substance, constantly turning over and renewing itself, especially in young dogs. So, proper nourishment of the cartilage tissue is important at all stages of an active dog’s life, not just when visible signs of joint degeneration appear.

Many factors can contribute to the net loss of cartilage in a dog’s joints. Hip dysplasia (an improperly formed ball and socket joint in the hip) and osteochondrosis (poor structural integrity, sometimes due to poor

breeding) top the list of hereditary conditions. Injuries to the joint as a result of a dislocation, torn ligaments, or even the trauma of surgery may cause cartilage deterioration. Bone “spurs,” or the excessive growth of bone material in the joint, inflame the joint and break down healthy cartilage. Inflammatory and degenerative joint diseases, like Lyme disease, can affect dogs of all ages. And of course, osteoarthritis – the slowly progressing erosion of cartilage due to age or excessive use of the joint – has become one of the most frequently diagnosed health problems in older and highly active mature dogs.

Symptom-relief strategy

A conventional treatment for the discomfort of joint pain in dogs is the administration of pain-relieving non-steroidal anti-inflammatory drugs (NSAIDs), including aspirin, as well as Rimadyl, Deramaxx, and EtoGesic. These pharmaceuticals temporarily relieve pain but may also produce significant, unwanted side effects ranging from gastric upset and bleeding to liver damage and seizures. All of the NSAIDs have been plagued by reports of serious health problems resulting from their use. But they continue to find a following among veterinarians and dog owners who value their potent and fast-acting pain relief.

Unfortunately, many people do not understand that pain relief drugs may mask escalating joint problems. These products do nothing to heal or stabilize the joint’s destruction; as soon as the drugs are discontinued, the dog again experiences all of the discomfort associated with joint deterioration.

Role in joint health

Joint cartilage contains an element called glucosamine, an essential building block of healthy cartilage tissue and a key ingredient in cartilage metabolism. A naturally occurring compound in many mammals’ bodies, glucosamine is composed of a sugar and an amino acid, which the body uses in the creation and repair of cartilage. Glucosamine molecules have low compressibility rates, which makes them excellent shock absorbers. These molecules also attract and hold water, which makes them great lubricants.

As joints degrade, a vicious cycle begins. When cartilage suffers damage, the joint area becomes inflamed, thereby releasing enzymes into the joint. These enzymes further break down the cartilage and thin the joint lubricating fluid. The absence of

healthy cartilage and the thinning of protective joint fluids make joints more susceptible to injury over time. More injuries add to the cycle of joint deterioration.

A “nutraceutical” or nutritional supplement rather than a drug, glucosamine is extracted from shellfish shells (although there is also a corn-derived version on the market). Available in several chemical forms, including glucosamine hydrochloride and glucosamine sulfate, glucosamine helps to improve joint health by supplementing the nourishment of the cartilage with more glucosamine than the body produces itself.

Therefore, adding glucosamine in the form of supplementation essentially tips the balance in favor of the creation of healthy cartilage, and halts the cycle of net cartilage

loss due to overuse, injury, or joint disease. The goal is to provide the tissue with plenty of the component the body uses to produce healthy cartilage cells that quickly replace damaged or lost cells. Glucosamine performs this work by creating an environment that supports cell formation and the thickening of joint fluids.

“Every active dog should be on a glucosamine source,” asserts Dr. Chris Bessent, a Wisconsin-based veterinarian specializing in natural treatment methods for performance horses and dogs. She explains that most athletic dogs have healthy joints that have not sustained damage yet. But, active dogs regularly “push the envelope,” causing some joint inflammation that can develop into early joint breakdown. Dr.

Athletic Dogs, Arthritic Dogs

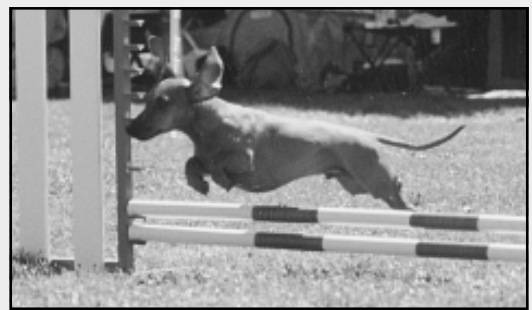
Glucosamine supplementation for the arthritic dog is “an absolute must,” says Dr. Bessent. Unfortunately, when signs of joint disease become visible, some inherent damage, such as the accumulation of calcium deposits, has already occurred. Glucosamine does not cure joint disease by reversing existing damage. Rather, it constantly aids in the replenishment of cartilage that decreases irritation, inflammation, and pain.

Remember that nutritional supplements act more slowly than pharmaceutical pain relievers. It may take as long as 30 days to see marked improvements in your dog’s condition using glucosamine. And, just as it takes a while for your dog to improve, it also takes a while for the beneficial effects of glucosamine to fade once supplementation is discontinued. Don’t declare your dog cured because he seems much better even after missing a few days of glucosamine supplementation. Plan on a lifetime maintenance program.

I’m committed to the addition of glucosamine supplementation to my dogs’ diets, in concert with their bimonthly chiropractic adjustments and fresh food meals. I’m now more confident that I’m doing my best to successfully work against the effects of years of high-energy activities on my dogs’ mobility, and giving them every opportunity to stay at the top of their game for a long time.

Fight the onset of joint degradation in your active, high-energy dog by putting into practice the following:

- Provide a daily glucosamine source beginning at 1-2 years old.
- Provide regular chiropractic adjustments to maintain structural integrity.
- Consider acupuncture, massage therapy, and other holistic practices, especially to support speedy recovery from slight to serious injuries.
- Exercise your dog regularly to maintain range of motion.
- Feed your dog a healthy diet filled with high quality nutrients.



All athletes, great and small, need preventive maintenance for peak performance.

Bessent refers to mature, athletic dogs that show the generalized, early signs of joint deterioration as “dogs running on four low tires.” Supplementing with glucosamine, she believes, “pumps up the tires” again.

Dr. Bessent recommends taking a proactive approach to joint maintenance and injury prevention starting when an athletic dog is one to two years old. This is a far-sighted approach that may not be appreciated by most dog owners, especially when they see the price tag on some glucosamine supplements.

Selling people on the value of preventive maintenance is difficult, unless they have had a dog with a promising competitive career cut short by osteoarthritis. This is the point at which most veterinarians will mention glucosamine to their clients, but much of the damage has already occurred. However, even in late-stage osteoarthritis, the supplement may improve matters enough to make it worthwhile.

Supplements abound

The pet supply marketplace overflows with all sorts of glucosamine supplements, many containing ingredients that reportedly enhance the positive effects of glucosamine. These supplements come in a variety of forms and dosages, and pricing runs all over the map. Just about every pet supplement manufacturer offers at least one glucosamine product.

Also, many manufacturers add “synergistic” ingredients to the supplement including vitamins C, D, and E; manganese; Omega-3 and Omega-6 fatty acids; and herbs like yucca and alfalfa. Many supplements also contain chondroitin sulfate, which some medical professionals believe

aids in holding fluids in the cartilage. Several manufacturers also offer chondroitin sulfate as a stand-alone product of equal importance to glucosamine.

Dr. Bessent has used both glucosamine and chondroitin in her practice for years, and has experienced “huge” clinical successes using glucosamine, and “some” clinical improvement using chondroitin. According to Dr. Bessent, the glucosamine molecules are smaller and probably have a better absorption rate than chondroitin.

Dr. Bessent says that the base product, glucosamine, is really inexpensive – a fact that won’t be apparent as you start shopping; many of the products on the market are quite expensive. However, the most expensive supplements tend to be the combination products. Shop around and choose reasonably priced combination products if you think the added ingredients are appropriate for your dog, but look for pure glucosamine if prevention of joint deterioration is your goal. “The glucosamine is the important part of the compound,” asserts Dr. Bessent.

Although, ironically, it’s no guarantee, make sure the manufacturer provides a “guaranteed analysis” of the amount of glucosamine in each dosage.

The results of tests of glucosamine and glucosamine-combination products conducted by ConsumerLab.com, a firm that provides independent test results and information to help consumers and healthcare professionals evaluate health, wellness, and nutrition products, were released in November 2003. Of 49 products they tested, four contained much less chondroitin than the products’ “guaranteed analysis” stated. Shockingly, two pet supplements contained *no* chondroitin whatsoever – None! Zip!

Zilch! – despite the labels claiming contents of 87.5 to 750 mg of chondroitin content.

Our recommendation is to look for a product with a guaranteed analysis, and then to contact the company and ask for proof of third-party testing or verification of the analysis.

Contraindicated

In cases where dogs have medical conditions that preclude supplementation with glucosamine, chondroitin provides a treatment alternative. Most commonly, these conditions are as follows:

■ **Dogs having trouble with bleeding** – Glucosamine may increase blood clotting times in dogs, so dogs with bleeding problems should not take glucosamine.

■ **Dogs diagnosed with diabetes or at risk for diabetes** – Glucosamine is sugar-based and is not appropriate for diabetic animals.

Again, when choosing a chondroitin supplement, look for a product with a guaranteed analysis; then, contact the company and ask if they have third-party testing or verification of the analysis. This sort of reporting sounds extreme, but for a pricey supplement, given for a long time, it’s necessary to make sure you get your money’s worth.

Delivery and dosage

There are several common delivery methods used for glucosamine supplementation: pills and capsules, powder, liquid, and intramuscular injection. Dr. Bessent deems all of these methods acceptable.

Comparison of 500 mg Daily Glucosamine Supplementation Cost

PRODUCT, MANUFACTURER	FORM	ADD’L INGREDIENTS	COST/DAY (500 MG)
Cosequin DS Nutramax Laboratories, Inc., Edgewood, MD (800) 925-5187; cosamin.com/veterinary/cosequin	Chewable tablet (by prescription)	Yes (Chondroitin, manganese ascorbate)	About 50-60 cents, purchased online
SynFlex for Pets Activex America, Inc., Holmes Beach, FL (941) 778-2155; activexamerica.com/pets	Liquid	Yes (Shark cartilage, boswellin, yucca, manganese ascorbate, bromelain, vitamins A, C, E, Omega 3 & 6)	About 47 cents
Vita-Flex GL Vita-Flex Nutrition, Waterbury, VT (800) 848-2359; vita-flex.com	Powder	Yes (Vitamin C)	About 12 cents

When an owner plans to use an oral glucosamine supplement, Dr. Bessent recommends a dosage level higher than she would use in an injection to accommodate some of the degradation that takes place in the dog's stomach during digestion. Intramuscular injection gets the glucosamine into the bloodstream without traveling through the "acid pit" of the stomach, so she administers lower dosages of the injectable products. Pills and capsules that degrade properly in the stomach offer the same bioavailability as powders and liquids.

Dr. Bessent recommends administering oral glucosamine supplements in the following daily dosages:

- Dogs 5-20 pounds: 250-500 mg
- Dogs 20-45 pounds: 500 mg
- Dogs 45-90 pounds: 1,000 mg
- Dogs more than 90 pounds: 1,500 mg

Use chondroitin supplements in the following daily dosages:

- Dogs less than 80 pounds: 900 mg
- Dogs more than 80 pounds: 1,800 mg

Dr. Bessent says she has been impressed recently with clinical results using d-acetyl glucosamine, a form of glucosamine given by injection. This supplement is not produced by pet supplement manufacturers and cannot be ordered from a catalog, but must be compounded by a veterinary pharmacist.

For many years Dr. Bessent has relied on Vita-Flex (vita-flex.com), an oral glucosamine supplement in powder form that she advises her clients to add to their horses' and dogs' food. For dog owners, check out the equine section of the Vita-Flex Web site, where the pricing is more attractive than for most "pet" supplements.

When determining the cost of glucosamine supplements, consider the following:

- Compare the cost per daily dosage of each product, not the cost per ounce or tablet. The milligrams of glucosamine per ounce or per pill vary by product, so calculate the cost of the appropriate daily dosage of each product for your dog's weight to find the true cost of administering it.
- Make sure the dosage amount you must

give your dog each day is reasonable. Some products require giving a large dog as many as eight capsules 2-3 times a day. Who wants to do that?

For Dash and her younger brother, I currently use Platinum Performance® Plus (platinumperformance.com) as their daily, all-purpose supplement. A high quality wellness and performance product, the Plus formula adds a joint support component in the form of glucosamine sulfate at 500 mg per tablespoon.

Fifteen-pound Dash's daily dose of Platinum Performance Plus (about two teaspoons) contains about 330 mg of glucosamine. I plan to either supplement this dosage with Vita-Flex to adjust her to the daily 500 mg level recommended by Dr. Bessent, or use the original Platinum Performance formula and add all of her glucosamine from Vita-Flex. 🐾

Lorie Long is a freelance writer and agility competitor from Virginia. Her most recent article for WDJ was "An Introduction to (Sports) Psychology," January 2004.

Supplement Helps Save the Day

Joan Mullen, of Menomonee Falls, Wisconsin, and her five-year-old male Belgian Malinois, Chase, compete in agility events throughout the mid-west and west. An American Kennel Club (AKC) agility judge and experienced obedience trial competitor, Joan has fought several battles against joint disease in Chase, and, thankfully, it looks like she and Chase have won the war.

Since his first days of working in agility, Joan had noticed that Chase's right rear leg turned inward slightly and at an unusual angle after running agility or playing hard. A highly motivated and super-fast agility dog, the condition didn't stop him from running well at agility trials.

In July 2002, Chase injured his spine in an agility practice session. The event was catastrophic, and Chase was partially paralyzed for the first hours following his injury due to the swelling in his spine. Over the next year, Joan implemented a complex rehabilitation program for Chase that included acupuncture, chiropractic adjustments, ultrasound treatments to support soft tissue repair, hydrotherapy, and complete rest between therapies.

In October 2002, while Chase was recovering from his spinal injury, he underwent surgery on his right rear knee to correct the turning-in of his leg. In 2003, Joan began to slowly

recondition Chase to return to agility. By September 2003, she and Chase were able to begin competing again. However, the knee surgery and all of the other therapies still had not corrected the turning-in of Chase's rear knee.

During chiropractic adjustment sessions with Chase, Dr. Chris Bessent noticed crepitation (grinding) in Chase's right knee and the beginning of crepitation in his left knee. She advised Joan to initiate a regimen of Adequan® injections, a glucosamine product manufactured by Luitpold Pharmaceuticals Inc. (luitpold.com).

Following the glucosamine therapy, Chase's knee has ceased turning in, even after running agility. Dr. Bessent has noticed the absence of grinding in Chase's knee joints during his chiropractic visits. Joan suspects that Chase injured his knee as a

puppy during play, and stretched the ligament too far. Even the surgery was unable to help return his knee joint to normal and he began to experience the start of degenerative joint disease.

Joan is delighted to have her agility partner back on the field with her again. Her advice to the owners of active dogs: "Be careful what you name your dog!" Chase's AKC registered name is "Kanduit Flirtin' With Disaster."



Chase is a poster-dog for glucosamine's benefits!

Unstinking a Skunked Dog

We didn't test every product on the market, just ones we could find FAST.

BY NANCY KERNS

We had not planned to review products that promise to remove skunk scent, but then, are skunk/dog conflicts ever planned? No, this was an emergency, and we dealt with it by running out the door to our local pet supply store and buying every odor-eliminating product on the shelves.

As I mentioned in my editorial, I promised my brother that I would dog-sit his darling Hannah while he and his girlfriend vacationed. It became quickly apparent to me that Hannah had been more closely acquainted with a skunk than is wise. My brother hadn't mentioned this to me, probably because he is completely without a sense of smell – a result, our mother always told us, of his many ear infections as a baby.

I work at home, in a little office built into the ground-floor basement. It works for me and the many test and model dogs who come and go, because they can lay around my feet or zip out into the backyard for a wild romp any time they like. I leave the door open when I'm working, but after Hannah got here, I had to open the window and put a big fan in it, too. Pee-yew!

Keith had brought one of Hannah's beds with her, but it was too stinky to bring inside. I hung it over a fence in my backyard to deal with later. Unfortunately, because Hannah had arrived at night, I couldn't do anything about her stench until the next morning.

Not the most scientific test

I've read accounts of double-blind lab tests of odor-removing products, complete with control groups. My test was going to be much less controlled! I had just one stinky dog on my hands, not a whole pack of them! Plus, there were only three products indicated for removing skunk-smell on the shelves of a local PETCO; I bought all three.

As I rode my bike back from PETCO, I made my plan. I would put each product on one third of Hannah – front, middle, and back end. I'd delineate the lines of demarcation with a Sharpie permanent marker. And I'd enlist my family and the neighbors who were still speaking to me to come over and "Smell the dog now!"

I changed my plan slightly when the first product I opened turned out to smell disgusting – easily as repulsive as the skunk. I put the top back on, and quickly checked the scent of the other two; they were inoffensive. I changed my battle plan to include just the other two products, one for Hannah's front half and one for the back half.

So, I didn't test **De-Skunk**, the product that smelled bad. To be specific, it has a super strong, sickly sweet, but bad chemical smell. The directions indicate that the product is supposed to be used promptly after the dog has been sprayed by a skunk – a caveat not made by the makers of the other products I tested. The dog is wetted with warm water, and then the thick, goopy product is applied much like shampoo. The directions suggest leaving it on for at least three to five minutes, rinsing well, and then repeating



 \$8.50; 32 fl oz

Note: We did not test this product

DE-SKUNK
Synergy Labs, Fort Lauderdale, FL
(954) 525-1133

The Whole  Dog Journal™

WHAT YOU CAN DO . . .

- If you live in an area where skunks are a hazard, buy and keep Nature's Miracle Skunk Odor Remover on hand. It's amazing.
- For dealing with other odors, dog-related or not, give Petrotech Odor Eliminator a try.

the process at least once more, or until the skunk odor is gone.





The label doesn't explain how it works, although a review of the ingredients (water, nonionic emulsifiers, citric acid, propylene glycol, pine oil extract, isoparaffinic solvent, polyquaternium 10, fragrance) suggests it acts as a solvent, deodorant, and astringent.

The maker, Synergy Labs of Fort Lauderdale, Florida, suggests following De-Skunk with a shampoo and conditioner. It's just as well I skipped testing this product, because the next two products I used were much simpler.

Enzyme-based

We've found enzyme-based odor removers to be safe, nontoxic, and effective for use in removing pet "accidents." For skunk scent, the products are applied directly to the dog's dry coat and allowed to dry.

The most effective enzyme-based product I tried, hands-down, was **Nature's Miracle Skunk Odor Remover**, made by Pets 'N People, Inc., a subsidiary of Eight In One Pet Products, of Hauppauge, New York. I used it on Hannah's back half, pouring the clear, watery liquid directly from the bottle onto her coat and rubbing it in well with my hands.

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.	

Nature's Miracle smells like rubbing alcohol, not surprisingly, since this is its second ingredient (after water). It also has a slight perfumey fragrance. The only other ingredients are "Nature's Enzymes," and natural citrus scent. It was easy to saturate Hannah's coat with the product, and despite

the alcohol, it didn't sting my eyes or skin, nor did it seem to bother Hannah in any way.

After Hannah dried, I could not detect any skunk odor on her back half at all. That *is* a miracle! She smelled like a fairly clean dog, and her coat was nice and soft.




NATURE'S MIRACLE SKUNK ODOR REMOVER
 Eight In One Pet Products,
 Hauppauge, NY
 (877) 880-8855
 \$10.50
 32 fl oz
 money back
 guarantee

On Hannah's front half, I used a product called **Pet Odor Eliminator**, made by Beaumont Products, Inc., of Kennesaw, Georgia. It came in a spray bottle, which made it easy to apply around her face (holding the bottle very close to her skin, to avoid getting into her eyes). But to really wet her shoulders and chest, I took the top off and poured the watery liquid over her, while rubbing it into her coat.

I was not crazy about the smell of Pet Odor Eliminator, which has a stronger perfumey odor than the Nature's Miracle product. However, this odor faded quite a bit as Hannah dried, along with the skunk odor, which was vastly reduced – but not *completely* gone.

I asked three "sniff test" volunteers which half of Hannah smelled better, and each said her back half was odorless, but

that they could still detect faint traces of skunk odor on her front half. Still, it was an amazing improvement. You had to really lean into Hannah's fur and sniff hard to pick up the scent, whereas before she was treated, you




PET ODOR ELIMINATOR
 Beaumont Products, Inc.,
 Kennesaw, GA
 (800) 451-7096
 citrusmagic.com
 \$9.50
 22 fl oz

could smell her from 20 feet away.

The label of this product does not list all its ingredients, only its active ingredient, "100% natural vegetable enzyme complex."

More testing

That night, as usual, Hannah slept in my office, and when I entered it the *next* morning, it still smelled a little. It was probably from two nights before, when she was still covered in skunk and got the scent on the dog bed that was in there.

That morning, I happened to go to my local health food store, looking for a dog shampoo that I love the smell of (CloudStar's Buddy Wash). On the shelf next to the shampoo was another enzymatic odor-removing product, **PureAyre Odor Eliminator**. Its label promised it eliminated all odors instantly, even skunk, and was child- and pet-safe. Its ingredients were listed as distilled water and plant enzymes. I bought it, too.

Back home, I decided to use this product on the bed that Hannah had slept on the night she was still skunky. I sprayed a generous amount on the bed, and rubbed it well into the fabric with my fingers. This product has a mild peppermint fragrance, and it definitely improved the smell of the dog bed once it dried.

I kept sniffing Hannah, too. Back end? Odorless. Front end? Well, still a little skunky. I decided to soak her front end again, this time with the PureAyre product.

Interestingly, when I first sprayed the watery liquid on her, it seemed to bring on the skunk smell again, and this persisted until she was completely dry. Then she smelled fine, skunk-free.

Of course, this was a slightly less vigorous test of the product than the other two received, since Hannah had already been treated once, and the bed received only a secondhand skunking. Still, I suspect that all three enzyme-based products are fairly similarly effective, with Nature's Miracle having

an edge over the other two for some reason. Nature's Miracle is also the only product of the four I bought that says on the label, "Guaranteed or your money back!" You gotta love that.




PUREAYRE ODOR ELIMINATOR
 Clean Earth Inc., Bellevue, WA
 (425) 881-5482
 pureayre.com
 \$8
 14 fl oz

Missed opportunity

At this point, I remembered that someone had sent me an odor-removing product once upon a time (I hadn't been able to *think* through the skunk smell!). After some digging, I found the product, **Petrotech Odor Eliminator**, distributed by SeaYu Enterprises, Inc., of San Francisco.

This product is radically different from the others I tried. SeaYu's Web site explains, "When Petrotech is sprayed on an odor source, it shears the hydrocarbon chain (of the odor source) and then encapsulates the odor source; this immediately eliminates the odor. Once Petrotech encapsulates the odor source, it becomes a microbial-food source for the indigenous bacteria in the environment, which accelerates the biodegradability of the odor source."

I still have no clue as to what is in it. But it's supposed to be safe for pets and humans, and the label indicates, "Satisfaction guaranteed! Or your money back!" And it says it works on skunk spray.

Only Hannah's bed from home was still skunky. I sprayed its cover fairly liberally, and rubbed the soapy-feeling liquid into the fabric with my hands. As the bed dried, I also misted my office carpet. Fairly quickly, my office actually did smell less . . . doggie.

Now I was intrigued. I walked around my house, spraying smelly things: a pair of running shoes, the inside of my car, the compost bucket, and even the outdoor garbage can. Each thing I misted immediately smelled less.

Incredulous, I went back to Hannah's bed. Whoops! It still smelled skunky, although *much* less so. SeaYu's Web site explains, "In order to eliminate the odor, Petrotech must be sprayed directly onto the odor source." My theory is that the skunk smell on the bed from home had saturated not just the cover, but the whole bed.

I didn't experiment further, however, leaving the bed outside for the rest of Hannah's stay. Given its other successes, I'll try Petrotech for other uses, and will report on it more thoroughly when we cover general-purpose pet odor removers. 🐾




PETROTECH ODOR ELIMINATOR
 SeaYu Enterprises, Inc.,
 San Francisco, CA
 (415) 566-9677; sea-yu.com
 \$13
 16 fl oz
 money back
 guarantee

Veterinary Perspectives

Your vet should be an important member of your problem-solving team if your dog displays idiopathic aggression.

I wanted to respond to Pat Miller's excellent article on idiopathic rage syndrome ("Rage Without Reason," WDJ July 2004).

While most cases of idiopathic rage syndrome are truly "idiopathic," some can actually be caused by the early stages of autoimmune thyroiditis. Most veterinarians and even many animal behaviorists may be unaware that this form of thyroiditis can appear as early as puberty or in the first one to two years of life, rather than as the commonly seen mid-life onset of classical clinical signs of hypothyroidism.

In fact, sudden unprovoked rage syndrome of an intermittent nature can be the hallmark of early thyroiditis, and is often undiagnosed because the veterinarian seeing the patient is unaware of the need to screen for thyroid dysfunction or doesn't perform the requisite complete thyroid antibody profile.

An association has recently been established between aberrant behavior and thyroid dysfunction in the dog. Typical clinical signs include unprovoked aggression toward other animals and/or people, sudden onset of a seizure disorder in adulthood, disorientations, moodiness, erratic temperament, periods of hyperactivity, hypoattentiveness, depression, fearfulness and phobias, anxiety, submissiveness, passivity, compulsiveness, and irritability. After the episodes, most of the animals appeared to be coming out of a trancelike state, and seemed unaware of their previous behavior.

The typical history starts out with a quiet, well-mannered, and sweet-natured puppy or young adult dog. The animal was outgoing, attended training classes for obedience, working, or dog show events, and came from a reputable breeder whose kennel has had no prior history of producing animals with behavioral problems. At the onset of puberty or

thereafter, however, sudden changes in personality are observed. Typical signs can be incessant whining, nervousness, schizoid behavior, fear in the presence of strangers, hyperventilating and undue sweating, disorientation, and failure to be attentive. These changes can progress to sudden unprovoked aggressiveness in unfamiliar situations with other animals, people, and especially with children.

Three recent cases involved young dogs referred for sudden onset rage syndrome shortly after puberty. These dogs (Siberian Husky, Bull terrier, Saint Bernard-cross) were found to have early onset autoimmune thyroiditis, which was rapidly responsive to thyroid supplementation as their behaviors reverted to those of sociable, outgoing family companions.

Collectively, these findings confirm the importance of including a complete thyroid antibody profile as part of the laboratory and clinical work up of any behavioral case.

W. Jean Dodds, DVM
President, Hemopet
Santa Monica, CA



Regarding Pat Miller's article about idiopathic aggression: This article was quite timely, as several dog-related e-mail groups have recently circulated the story of a dog who became suddenly and unpredictably aggressive. The cause was attributed to Lyme's disease.

Although it's true that Lyme's disease would be considered a rather rare cause of aggression, it should be on the list of differential diagnoses to consider in the case of a sudden and difficult-to-explain onset of aggression. Also included on this list should be rabies (!), seizures (epilepsy), and hypothyroidism. Other metabolic imbalances might also cause unusual signs such as aggression.

My point is that it's *extremely* important to rule out medical causes for *any* behavioral problem prior to consulting a "positive trainer/behavior consultant who can give you a more educated analysis of your dog's aggression." I don't discount the value of a skilled and experienced behavior professional, but no amount of behavioral modification is going to help an animal whose underlying cause is medical. I felt this point wasn't adequately addressed.

I did, however, appreciate the side box on the evolving vocabulary of aggression. This topic, especially the evolving theories regarding dominance aggression, is something I'd be interested in reading a lot more about!

J.C. Burcham, DVM
Olathe, KS

Our thanks to Dr. Dodds and Dr. Burcham for their insights; we apologize for omitting the recommendation to have a veterinarian examine any dog who displays unprovoked aggression. This has long been our suggestion when faced with ANY abnormal behavior. 🐾

WHAT'S AHEAD

New Sources for Meat

A number of pet food makers now sell several varieties of meat – canned or frozen – which you can use as a convenient base for your dog's home-prepared diet.

Gimme Shelter

Say you find a stray dog. Where is the best place to take it? Pat Miller explains how to determine which shelter in your area will do the most to find the dog a home.

Tour of the Dog

Holistic veterinarian Randy Kidd leads us on a journey of the dog's anatomy. He'll point out things to monitor, and discuss methods that can maximize the health of each system. First stop? The canine eye.

Training Test

How much have you learned about the best way to train a new dog?

The Early Spay/Neuter Controversy

Some holistic veterinarians and breeders fear that early spay/neuter surgery can cause health problems in the dog later on. We look for the evidence.

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

Dog Packing in National Parks: How a Pack Dog Became a Service Dog, by Jane Cox, is published by Cross Country Publications, Central Point, OR. crosscountrypublications.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

HOLISTIC VETERINARIANS

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

TRAINING AND INSTRUCTION

The Association of Pet Dog Trainers (APDT) has references to member trainers in your area. Write to PO Box 1781, Hobbs, NM 88241, call (800) 738-3647, or view its database of trainers 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

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