



A monthly guide to natural dog care and training

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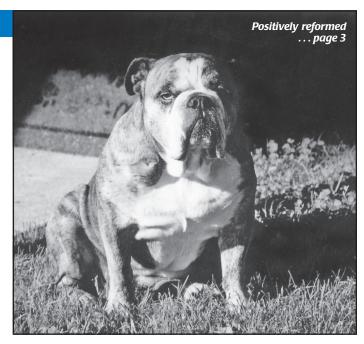
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What Would You Do?

Are we our fellow dog-owners' keepers?

BY NANCY KERNS

hat do you do, what do you say? When you're out in the world somewhere and you're the token "dog person" and you're witness to a dog (or a dog owner) engaged in some behavior that so appalls you that you feel kind of guilty by association?

For example, a few weeks ago, I was enjoying an early breakfast with my husband at our favorite bagel shop. Into the restaurant and up to the takeout counter walks a lady with a *large* mixed-breed dog on a leash. The counter person, a shy young Asian girl, smiles uncomfortably at the health-code violation, but simply asks the woman what she would like – no doubt hoping it's something she can hand to the woman quickly and get her out of there.

But the woman orders something complex, and then sits down at a table *in* the restaurant, prepared to wait – with the dog wandering around the table, sniffing for scraps.

My husband – *not* a dog lover – gives me a look. I look at him and make a face, and then look pointedly back at my newspaper. Out of the corner of my eye I see other diners exchange eye rolls and looks of distaste, but no one says anything to the lady with the dog.

Then the dog somehow slips his collar and comes trotting over to our table, where he dives underneath for a crust. His owner seems not the slightest bit distressed, but comes over and hauls him by the scruff out from under our table, apologizing, sort of, for the collar! My husband is looking *very* disgusted, but I bury my head in the paper, pretending I'm not seeing this. I can tell he's on the verge of erupting.

Finally her order is ready and the woman goes to the register to pay. The counter girl

reaches to hand over the food, and – the *coup de grace* – the dog jumps up on the counter with his front paws to reach for what he undoubtedly thought was a treat for him. The girl lets out an involuntary shriek . . . and my husband has had enough.

"Ma'am?" he barks. "Are you aware it's illegal to have a dog in a restaurant? Not to mention rude? Not to mention you have no control over that dog?" Of *course* she's aware of that! Before he says more she smirks with a fake smile and says, "Oh, gosh, thanks!" and walks out, leaving my husband fuming. "These are *your* people," he says to me, as if I'm somehow responsible for all dog owners.

Δm I2

I'll admit I was being a chicken, hiding behind my paper and hoping the woman and her dog would go away. I had barely even *started* my coffee. But I know plenty of other people who would have gone over to the lady and asked her – politely or not – to take the dog outside. I have friends who probably would have offered to go outside and hold the dog's leash (and tightened his collar!) while the lady paid for and picked up her order.

I've been thinking about it for a few weeks, and I think I erred in not saying or doing *something*. People like that lady – and people who don't pick up their dogs' poop, or allow their dogs to run up to and jump on people (with the famous cry of, "He's nice! He won't hurt you!") – make *all* of us dog owners look bad. The next thing you know, the restaurant owners may ban dogs from their outdoor tables. But how do you effectively handle one of these inconsiderate people without being a jerk yourself? Ideas?

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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Helping Hera Help Herself

A reactive dog "positively" learns self-control – and even social skills.

BY CARYL-ROSE POFCHER

era is an nine-year-old spayed English Bulldog. Today I know to describe her as "reactive." She has also been called aggressive, stubborn, willful, dominant, stupid, bad, and even conniving.

She is a "crossover dog," meaning that we, her humans, started off using techniques that included jerking and pulling on her leash and collar, a choke collar, a prong collar, and even growling at her. Of course, we also used praise and some treats. Later, we "crossed over" to using only positive techniques and relied heavily on the clicker.

During the first four years of her life, when we used those earlier techniques, Hera became more reactive. She became faster to "launch" into a mindless fit of barking, growling, and pulling, more intense in her reactions. Although it was her reactivity to



WHAT YOU CAN DO . . .

- First, do no harm. If a trainer asks you to do something that, in your judgement, may scare or intimidate your dog, respectfully decline. He may be an "expert," but you are going to live with your dog for the rest of her life.
- If your dog or puppy seems especially reactive, start as early as possible to alter her view of frightening, threatening, or arousing stimuli by using counter-conditioning and desensitization.
- Success lies in three concepts: Patience, repetition, and small steps.

other dogs that we focused on, it wasn't limited to dogs: roller bladers; skateboarders; bicycles; wheelbarrows; big trucks; buses; motorcycles; flags fluttering overhead; people walking past her with fluttery or dangly things like handbags, briefcases, long flowing skirts, or belts dangling from trench coats; an upstairs window opening as she walked past – and then there was the day she eyed an electric wheel chair! Squirrels weren't safe from her attempts, nor was the occasional horse we'd see in parks or police horseback patrols.

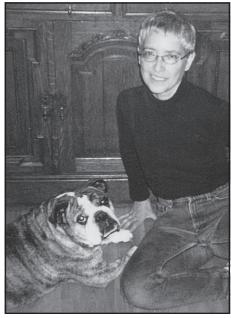
I write this with a certain lightness of tone but make no mistake: Hera's lunges were frightening. A Bulldog has muscle and strength, a low center of gravity, large chest, big head, big neck, and strong jaws with a large, tooth-filled mouth. She would lunge and snarl furiously. While engaged in these outbursts she displayed a glazed intensity that was frightening and potentially dangerous.

My husband, Billy, and I were the barely effective anchors at the end of her leash, preventing her from getting full speed and achieving her goals. Sometimes I would almost be knocked off my feet by her sudden sprint after something or other. On multiple occasions, in desperation, to stop being dragged forward, I hooked my arm around a parking meter or lamppost. My shoulder was wrenched many times. When in reactive mode, Hera, a 68-pound Bulldog, could and did pull me, a 115-pound woman, down the street almost at will. Those parking meters were part of my safety strategy!

Unlike the typical phlegmatic image of the bulldog, Hera is agile, fast, strong, and athletic. And highly reactive.

How did this happen?

We started a 12-week puppy training class when Hera was 10 weeks old (it actually lasted 15 weeks because of a few interruptions in the schedule). We were told Hera was skittish, timid, stubborn, and fearful and that we had to show her we were in charge



After force-based training increased her reactivity to dogs (and many other stimuli), Hera's owners found positive training – and she vastly improved.

and expose her to a lot of new things.

To demonstrate these pronouncements, the assistant instructor once picked up a large dictionary and briskly walked straight toward us. As she approached, Hera turned her side to the approaching human and sidestepped back a bit. The assistant dropped the book to the floor with a great "slam," inches from Hera, who skittered back and pulled to move away further. We were told to prevent her from getting further away and to ignore her.

Hera didn't recover from that startle; she never came forward to curiously sniff the offending object, but continued trying to get away until the instructor finally said we could walk away with her.

In retrospect, I believe this and other events helped our skittish puppy learn that the world was not safe and that we, her humans, did not protect her.

We were the "bad apple" in puppy class, told by the instructor that we needed a choke

collar and had to teach Hera who was in charge before it was too late. "Too late" raised dire images in our minds but we dared not asked for clarification, afraid we'd be told our beloved puppy was going to be a vicious monster. We were told her neck was very strong and we had to yank very hard in order to communicate with her.

We worked harder and followed instructions; Hera became harder to control, more apt to lunge, and less and less attentive to us. So we tried harder.

Hera knew how to "sit" prior to class. I'd read a dog training book and learned to lure her into a sit with a treat held over her head and moved back toward her tail. It worked quickly and was a game that we both seemed to enjoy. She loved to do "sit," sometimes earning a treat or piece of kibble for the act, always earning praise. I looked forward to the class teaching us how to get a "down" in a similar fashion.

It didn't happen that way. In class, we were told to teach "sit" by pushing on her butt and pulling up on the leash while saying "Sit." We said she already knew. We were told she would now learn a new way. We were told to push. We pushed. She resisted. By the end of the class, "sit" had gone to hell in a handbasket!

We tried to obey our instructors, but a lot of what we were told to do felt wrong and uncomfortable to us, and so we complied erratically. Not surprisingly, Hera's behavior became worse.

Hera always seemed excited about class, pulling to get inside, winding up as soon as we'd drive into the parking lot. On the way home, she was increasingly hard to control, lunging and pulling at every dog, a leaf blowing across our path, or a sudden sound.

At home she was our dear puppy, the love of our lives. However, we were disappointed she never snuggled. She stayed close but shunned curling up with us. She was also face shy and didn't like grooming.

Hera was 25 weeks old at the end of the class. She had gained a great deal of strength and we had started to worry. She got her "diploma" but we also got a "look" when it was handed to us. We knew we had failed.

The owners' education begins

Over the next few months, I started reading about dog behavior and training. My husband was happy to leave it in my hands. He was the one who wanted a dog in the first place, but this wasn't what either of us anticipated! I think he was relieved that I took on the project.

I talked with the owners of Hera's parents and learned that her father was equally reactive and reactive to similar triggers. His owners described him as "energetic and interested in everything." But when I got details, and later watched them walk him down a city street, I saw he was highly reactive to most of the same triggers as our girl. He spent most of his life on a prong collar, kept on a short leash.

Hera's mother exhibited reactivity less often, perhaps because in general she was a more sluggish dog. Her owners described her as "feisty" but only if something got close enough. Ah yes, Mom had a hair trigger when something was within her range.

I saw that we were probably dealing with a combination of genetics and our own lack of understanding. I started to seriously educate myself, becoming more selective about techniques I would use and would not use. As you'll see, this education lead me on a life path I'd never anticipated.

Trying "teenage" times

At adolescence, Hera's troubling behaviors outside the house intensified. She had been "the cute Bulldog puppy" at the dog park, but she soon became "that bad dog." She had some spats, and would run across the dog park to jump on various dogs, snarling and growling when she reached them. We tried to identify trends in what would set her off, and thought we did see some, but there were exceptions to every "rule" we observed. She jumped some dogs who seemed to be minding their own business as well as dogs who seemed to be approaching her. She ignored other dogs who seemed to be minding their own business and some who seemed to be approaching her.

The good news was that she had good bite inhibition; she never broke the skin of the other dog. (She did, however, knock them down and mouth them, looking for all the world like she was tearing their throats out.) And often she played with other dogs, wrestling, taking turns being on top or bottom, mouthing gently and being mouthed. She chased and was chased, but generally couldn't keep up with the longer-legged pups. She had favorite playmates at the park, a German Shepherd Dog pup who would drag her around by her scruff and a Pit Bull with whom she loved to wrestle.

But our last day at the dog park was the day that I heard someone say, as we approached the dog park gate, "Hera's here!" and someone else respond, "I was just about ready to leave anyway."

More unhelpful training

When Hera was about 18 months, we went to an adult dog training class. This instructor told us to use a prong collar. We bought one but often we "forgot" to bring it to class. We walked her with it a couple of times but just couldn't get ourselves comfortable with the tool even after we'd followed the instructor's directions to put it around our own thighs and jerk so we'd know it didn't hurt terribly much. Bulldogs have a very thick, muscular neck and a very high pain threshold. Still, we didn't use the prong collar much or consistently.

When the class practiced loose leash walking by zigzagging around the room, Hera would lunge at the other dogs. Hera was the only dog who didn't pass the Canine Good Citizen (CGC) test in the class. She was given a diploma, but again, we knew it wasn't "earned."

During this time, Hera began exhibiting a new frightening behavior: jumping on anyone holding a live thing, such as a baby, another dog, or a cat. She would jump with a glazed look in her eyes, pupils dilated, seemingly obsessed. She didn't bite or grab, but she would keep jumping until one of us could tackle her and manhandle her away.

This behavior made it more and more difficult to take Hera anywhere "safe" to let her off-leash. One spring morning, on a weekday about 6 a.m., when I thought it would be safe to take Hera to the beach for an off-leash romp, Hera spotted a man walking carrying an infant. I caught up with her as she was making her second or third jump up the man's leg, and I body-tackled her. She squirmed away. Terrified, I grabbed her again and managed to instruct the understandably upset man to, "Please go away!" He asked what was the matter with my dog. I wished I knew!

So when Hera was about three years old, we brought in a dog behaviorist who met with us in our own home to see Hera's environment and behavior. We were introduced to the concept of "nothing in life is free" (NILIF), where the dog has to perform some sort of behavior, on cue, before he "earns" *any* sort of reward – attention, food, a toy, affection, going outside, jumping up on the couch, etc. And we were told to repeatedly practice a very good "sit" and "down" so she would sit on command instead of jumping or lunging.

But the trainer *also* asked us why we didn't put this dog down and get the dog we had intended: a malleable, obedient dog who would walk quietly on leash and sit

beside me at cafes. We were frightened by the implication that her behavior was so bad the behaviorist was indirectly suggesting she be killed.

Even so, the consultation was helpful. NILIF gave us a good tool, and Hera's sit became better, although it never was "strong" enough to interfere with her jumping or lunging. When she did a "down" at all, it was never for more than two seconds.

Concerned that all the pulling that she did on leash could damage Hera's small Bulldog trachea, we changed to a harness. This eliminated pressure on her throat but also gave her even greater pulling leverage.

Life-changing events

When Hera was four, life changed for all of us. I moved to Washington, DC, for a four-month work assignment. I took Hera with me, since I would have ample time to spend with her after work. I vowed to spend the four months with a dog trainer who didn't use physical force and who would work with us individually to make our walks less fraught with peril. Literally, that was my goal. I still have it written down on the form I completed for the instructor, Penelope Brown, of Phi Beta K-9 in DC.

Brown introduced me to the clicker and positive training, and I think of her as our turning point, our savior, who changed our lives. I tried to argue her out of the clicker, saying, "But I already have the leash in one hand, treats and poop bags in my pocket, a water bottle for the dog, and maybe, just maybe, I'd like to carry a coffee mug for me!" She was patient, knowledge-

able, humorous, and persistent. I learned to use a clicker, stopped trying to carry a coffee mug, and learned to consider all of our walks as training opportunities.

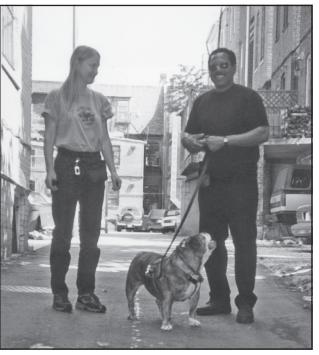
Under Brown's tutelage, Hera and I had a great four months! Not only did our walks become "less fraught with peril," Hera finally learned to walk past other dogs without lunging, as long as I worked with her and we had a space of about 12 feet between them.

When we started, Hera's "launch point" was two blocks away from another dog, with the dog on the opposite side of the street and walking away from us. I learned to read her body language and to scan our environment. Hera would see a dog and I'd "click"

before she launched and shove a handful of treats in her face, as both classical conditioning to change her underlying emotional response to the sight and presence of other dogs, and, increasingly, as a reward for not launching herself toward the other dog.

I also learned to position treats in such a way so as to break her gaze and lure her away from the other dog. If she launched before I could do that, I learned to turn us away anyway and use that same handful of treats for classical conditioning.

We progressed. After about six weeks, Hera's launch point had changed from two blocks to one. At this point, I added oper-



Working with trainer Penelope Brown (left), of Phi Beta K9 in Washington, DC, was a revelation to Caryl-Rose and her husband, Billy Rover. Hera progressed rapidly with the all-positive techniques Brown taught to her owners.

ant conditioning in that second block distance. When she looked at the other dog but did not display any aggression, I clicked and gave her a treat. In time, she learned to look at the dog and then turn to look at me on her own.

After about another month, if the dog was on the other side of the street, it could be coming toward us and pass (on the other side of the street) without a noticeable reaction from Hera. After another two or three weeks, the dog could be on the same side of the street walking in front of us/away from us, or behind us/not catching up, at a distance of about half a block. If I kept clicking and giving her treats at a rapid rate, she didn't launch.

I continued to build on her progress, by spacing out the clicks, allowing her to look longer, one moment at a time, at the other dog. I became far more adept at reading her body language, and saw that now she would see another dog and "freeze," not instantly launch. I observed that if the freeze lasted more than about two or three seconds, there was a higher likelihood that she would launch. If she broke the freeze before that, she was likely to initiate play if the dog was close or simply keep moving if the dog was farther off. So I would click and treat (if the other dog was far enough away for me to safely introduce food into the scene) after a

two-second freeze. Hera would turn to me for the treat and that broke the freeze. Then she could look back at the dog and we'd repeat.

Sometimes I'd click and treat as I walked us away. I tried to judge the amount of tension Hera could tolerate before going "mindless." The more we worked with positive techniques, the more self-control Hera gained.

More positive help

Hera and I returned home after my four-month assignment with a whole new bag of tricks to teach my husband! It was clear at this point I had become Hera's primary trainer.

I looked for and found another wonderful positive trainer, this one near Boston. Emma Parsons, of The Creative Canine, in North Chelmsford, Massachusetts, had personal experience with a dog-aggressive dog. She brought us further along our path and served as a living role model, proof positive that at least one woman and one dog had come

out the other side of this nightmare. Parsons' dog had been in competitions, could walk through a show area full of dogs, and lived at home with other dogs. I was heartened.

Parsons put us together with a local dog training club that kindly let us walk around on the edges of their classes. Hera and I could practice being calm in an environment full of dogs – an *inside* environment, very different and actually much harder for Hera than outdoors. Parsons was very patient and creative in teaching us what we needed to learn.

Sometimes it helps to see how someone else does something to make the words of instruction "real." I had thought I was giving Hera lots of treats as we walked through

dog-filled sections of the room but still she would frequently lunge at the other dogs. Then our trainer showed me, using her own dog, what she meant by giving treats "frequently" – at least five times the rate I was using! That was a major breakthrough in my learning and in Hera's behavior.

I also learned that Hera was more stressed by a dog coming right at us than by a dog coming toward us at an angle. So, if a dog was coming right at us, we'd veer off and angle *our* direction.

I learned to walk while giving a lot of information to Hera: frequent clicks for calm behavior with lots and lots of really great treats, treats shoveled into Hera's mouth as she took non-lunging step after non-lunging step. I was lucky. Some reactive dogs become so stressed that they won't take even high-value treats, but Hera almost always took them.

My goal expanded from being able to walk my dog on city streets past other dogs, to being able to walk with her safely on a beach, where loose dogs could approach us without Hera exhibiting aggressive behavior. Eventually, we actually got there.

Advanced education: Dealing with loose dogs

First, Hera began to have more dog friends, walking companions. She's always had at least a couple, so we had that to build from. Each dog was introduced to our social circle slowly and carefully, with me orchestrating the meetings until the dogs were at ease, usually for three or four meetings. I let them see each other at a distance, with lots of clicks and treats for Hera, zigzag walking around, progressing to some parallel walking, sometimes on opposite sides of the street, sometimes with the other dog on the same side and ahead of us.

Gradually I would close the distance for brief periods, extend the periods, close a bit more but for shorter periods, then gradually lengthen *those* periods.

Vivid in my memory is the day Hera was startled by the sudden appearance of a dog coming out of a door just yards in front of us. She froze, stared, and turned to look at me on her own! She had made the choice to look away in a highly charged situation! Treats flowed into her mouth for that, a jackpot like no other jackpot!

After that, I'd keep Hera's attention ping-ponging between other dogs and me by clicking/treats for her voluntary head turn or clicking/treats to break the stare if I felt it was going on too long. When I misjudged

and waited too long, she would launch. But "too long" varied and generally was getting to be a longer and longer time.

I learned to take things in smaller steps than I'd ever considered. When I could control the situation, I kept these sessions short (two to five minutes). When I couldn't (dog off leash with no handler), they lasted as long as they lasted.

When Hera did play with another dog, while she was playing, I frequently repeated "Friend, Hera, it's a friend!" I used a particular tone of voice and rhythm saying this phrase. For several months, I used it only when she was relaxed and playing with another dog.



Hera finally earned her CGC certificate, and loves to perform tricks. She even does a little backyard agility!

Later, on the beach, if a loose dog came toward us, I would click and treat while it was at a safe enough distance to introduce food. When the other dog moved closer, I would start my "Friend, Hera, it's a friend!" cue. I watched Hera and the other dog and if needed, I would step between them to break any intensity Hera might display. As the distance closed, I kept Hera's attention ping-ponging between the dog and me, as described above. The dogs often got to meet but I orchestrated the lead-up and the actual meeting. I ended the meeting if I saw too much tension.

If the other dog was loose and seemed threatening, simply rude, or determined to come greet Hera when I could see Hera did not want this, I would sometimes toss some treats at the feet of the approaching dog to distract him. If he took those, my next toss would be over his head or to his side so he would turn for them. That made it much easier for Hera to turn away, too. Sometimes I looked at the other dog and said "SIT!"

Amazingly, this sometimes worked, too.

Yet sometimes nothing would work, and Hera was sending clear signals she did not want to meet the oncoming dog or that she would behave aggressively. Then I would cue her to a U-turn (a technique advocated by Patricia McConnell in her book, *Feisty Fido*), chant my "Friend!" cue, and click and treat when possible. Often those things would do the trick and we would either avoid the meeting or the meeting would be brief and uneventful. Yet even now, there are occasions when Hera will lunge. She has come a very long way, but she is not, nor will she ever be (in my opinion), a "normal" dog.

About this same time, I saw the debut of the SENSE-ation Harness (see "Making Headway," WDJ February 2005). I purchased one to replace her old-style walking harness. The leash clasps in front at the dog's chest and this gives great control to the handler. This was another tool that really helped us.

By the time Hera was 6½, she could pass another dog on the sidewalk if I managed the situation. She no longer needed a 12-foot buffer zone; two feet would do. At that time, it was usually my preference to cross the street to avoid the stress it put on me and on Hera.

Pulled into a new career

If it sounds like I was immersed in dog training almost all the time, it's because I was! The more I researched positive, effective dog training methods, the more interested I became in the field. I was excited when I learned about the Association of Pet Dog Trainers (APDT) and attended one of its annual educational conferences. I had gone to absorb information about positive training, but it turned out to be a significant step in my new career path!

As Hera and I learned and changed, I realized that I had a new passion, a new career. I wanted to be a pet dog trainer, and help others avoid going as far down the dismal road that we had traveled, and help them come back if they were already on it.

I found a positive trainer in my area, explained I was preparing myself to become a positive pet dog trainer, and asked to volunteer with her. I also added a part-time job to my day job, working at a doggie day care. There, I learned more about how "nice" dogs interact freely with each other and how to read their body language, intervene effectively, redirect behaviors and attention, and practice what I'd learned from Norwe-

gian dog trainer Turid Rugaas' tapes and booklet.

I joined Clicker Solutions, a Web site and e-mail list "dedicated to helping pet owners improve the relationship with their pets by teaching training and management techniques which are understandable and reinforcing to both human and animal." On this and other lists that discussed positive training for aggressive dogs, I coined "Herathe-WonderDog!" as Hera's identifier, because I saw she truly was a wonder dog!

When Hera was seven years old, with the help of other wonderful positive trainers who also let me assist them, plus an abundance of workshops, seminars, conferences, journals, e-lists, books, etc., I started "My Dog, LLC," my pet dog training business. Of course, for me, it had all started with my dog.

Presently present

Today, Hera is nine years old. She will never be the dog who sits ignored at my feet at a cafe, nor the dog ambling beside me on a walk, while I ignore her and chat with my friend. I am always watchful and managing and training. But now, sometimes, I take my plastic coffee mug on our neighborhood walks. (Yes, there have been a few times when I've dropped the coffee to manage a surprise situation!)

Outside, Hera is my focus. I glance around at trees, houses, and storefronts, but I also scan for other dogs, roller bladers, skateboarders, cats, squirrels, Canada geese, infants in arms/small dogs being carried, big trucks, or fast moving vehicles of any sort

moving right at us. I watch her body language to know when she is stressed. She teaches me what concerns her, and I do my best to give her enough information to get through it or I manage the environment to reduce or remove the stressor.

The clicker is my main communicator. And treats. Even today, when we go to local parks, the waiting room at her vet's, and pet supply stores – places frequented by people with their dogs – we train with

clicker and treats. When we sit at a table outside my favorite coffee shop, I have my coffee, clicker, and several different treats at my fingertips. We enjoy the weather, watch the world go by, and train. Always, we train.

Much of the time now, Hera seems in-

terested in meeting the other dog, so I orchestrate by ping-ponging her attention, zigzagging and blocking approaches, happy talk, cuing "friend!" and using clicks and treats as much as possible, as well as keeping first sniffs brief. I turn her away and come back, and end the meeting while all is still going well. Often, now, Hera ends the meeting on her own!

If I am in doubt as to Hera's stress level, her ability to handle the situation, I get us out of the situation. I say, "Let's GO!" and we turn and trot away. Click and treat for both of us! We don't need to do that very often any more, but knowing it is there, our safety net, helps me feel more comfortable. And we practice a quick U-turn. I've taught it to her on the cue "Wow!" because I simply can't sound panicked and stressed when I say "Wow!"

Hera now has doggie friends. I value each of them. We meet for walks. We make new friends carefully, with disclosure of Hera's reactivity and how we manage our greeting rituals. Each new friend, each acquaintance she tolerates, is a major delight! Some dogs (more and more all the time), she simply meets and greets. I can't say she does it "normally" because I believe that under the surface, the reactivity is still there. But now she has a much thicker surface, a greater buffer of resilience before her reactivity is triggered.

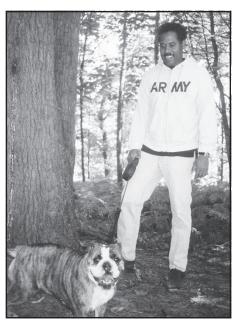
Take nothing for granted

Obviously, this training approach has become our lifestyle. With a reactive dog, you take nothing for granted. Building a solid



base and watching the dog to evaluate and reevaluate when and how fast to progress is critical.

In November 2003, she received – and deserved! – her Canine Good Citizen certification, and in early 2004 she participated in a "clicker tricks" class and did very well.



Billy and Hera on a hike. The athletic Bulldog is now fun to walk with, but can't be taken for granted.

I love this dog. I wish I could go back and change those first four years, but I can't.

What I *can* do is use positive techniques with her for the rest of her life. I can and will keep learning to better help her at every stage.

I encourage her to use her lovely, bright, eager mind. We play games, she does backyard agility, and she does tricks. She visits folks in a local nursing home weekly. She holds a lovely long "sit" and has a pretty "down." She greets people with a sit and a "high five" or a "wave," as cued, and shakes paw when asked, all learned with the clicker and positive reinforcement – all learned with glee, not pain, not stress, not resistance.

Hera now makes up games and initiates play. She snuggles with me, lets me clean and care for her face wrinkles, and accepts brushing. She's truly my wonderful, wonderful, wonder dog.

Editor's note: Caryl-Rose's husband Billy was diagnosed with cancer in mid-2004 and he passed away that September. With his support of and involvement with Hera's behavior rehabilition, Billy was an important contributor to Hera's success. She returns the favor by loving and supporting Caryl-Rose in Billy's absence.

Caryl-Rose Poscher is owner of My Dog, LLC, in Amherst, Massachusetts. This is her first contribution to WDJ. See "Resources," page 24, for contact information.

How to Choose a Food

You are uniquely well-qualified to select the best food for your dog.

BY NANCY KERNS

o one is in a better position than you are to decide which food you should feed your dog. That may not be what you wanted to hear. You may have been hoping that someone would reveal to you the name of the world's healthiest food, so you could just buy that and have it done with.

But dogs, just like people, are individuals. What works for this dog won't work for that one. A Pointer who goes jogging with his marathon-running owner every day needs a lot more calories than the Golden Retriever who watches TV all day. The diet that contains enough fat to keep that sled dog warm through an Alaskan winter would kill that Miniature Poodle who suffers from pancreatitis. The commercial kibble that stopped my Border Collie's itching and scratching in its tracks may cause your Bedlington Terrier to develop copper storage disease.

Every food on the market contains different ingredients, and each one has the potential to cause symptoms of allergy or intolerance in some dogs. Every food contains a different ratio of macronutrients – protein, fat, and carbohydrates – and you have to learn by trial and error which ratio works best for your dog. Each product contains varying amounts of vitamins and minerals, and though most fall within the ranges considered acceptable by the Association of American Feed Control Officials (AAFCO), some may be in excess of, or deficient to *your* dog's needs.

So how do you choose?

The starting place

Well, you have to start somewhere, and you undoubtedly have. Your dog is eating *something* already. We hope it's a food that meets WDJ's selection criteria, which is outlined annually in the February issue. We highlight a number of foods on our "approved" list, but consider any food that meets our selection criteria to be as good as the ones on our list. Our goal is to help you identify the foods with the best-quality ingredients — whole meats, vegetables, fruits, and grains,



WHAT YOU CAN DO . . .

- Assess your dog's condition and response to his current diet.
- Ask your veterinarian about potentially beneficial adjustments that could be made to your dog's diet.
- Read Home-Prepared Dog & Cat Diets, by Donald R. Strombeck, even if you don't plan to feed your dog a home-prepared diet!
- Keep a written record of your dog's diet and health status. Record any significant change in the food you feed him and in his physical and energetic response.



Should you set up blind taste tests for your dog? Ask your vet what to feed your dog? Go with what your dog-walker suggests? Choose whichever product WDJ says to feed? The answer to every one of these questions is NO!

and high-quality sources of dietary fat – to get you into the right "ballpark" in terms of quality. Then you have to start individualized feeding trials on your dog.

Start by assessing your dog's health. Take a sheet of paper and make a list with two columns: one for health problems, and one for health assets. Any conditions for which she receives veterinary care or medications go in the "problems" column. Other conditions that should be listed here include bad breath; teeth that are prone to tartar buildup; chronically goopy eyes; infectionprone or stinky ears; a smelly, greasy, flaky, or thinning coat; itchy paws; excessive gas; recurrent diarrhea, constipation, or incontinence; repeated infestations of worms or fleas; low or excessive energy; and a sudden onset of antisocial or aggressive behavior.

In the health assets column, list all the

health characteristics that your dog has in her favor, such as fresh breath, clean teeth, bright eyes, clean ears, a lack of itching, a glossy coat, problem-free elimination, a normal appetite and energy level, and a good attitude.

If there are a lot more assets on your list than problems, and the problems are very minor, you may have already found a diet that works well for your dog. But if your list reveals a lot more problems than assets, your dog is a good candidate for a change of diet – in addition to an examination and some guidance from a good holistic veterinarian!

Now take a look at the food you are currently feeding your dog. Note the food's ingredients, as well as its protein and fat levels, and its caloric content. *Write all of this down*, so you can make logical adjustments if need be (see "Keep a Health Journal for Your Dog," below).

Nutritional management of disease

Just two decades ago, it was considered fairly radical to propose that canine diseases could be treated, at least in part, by manipulating the patients' diets. Today, the increasing availability of "prescription" diets is the big story in the pet food industry. As stated by the editors in the preface of the fourth edition (2000) of *Small Animal Clinical Nutrition* (the nutrition bible for most veterinarians):

"This is truly an exciting time for those involved in the discipline of clinical nutrition because of the veterinary profession's increased understanding of the role of nutrition in health and disease management, pet owners' continued interest in receiving the best nutritional information for their pets and the recent proliferation of commercially available therapeutic foods. Our ability to improve the quality of life for pets and their owners is great."

If your dog has any sort of disease or an inherited propensity for disease, ask your veterinarian about the benefits of nutritional therapy to help treat or prevent the disease. Don't settle for the suggestion of a commercial "prescription" diet; most of them are formulated with lower-quality ingredients. Instead, ask what specifically in the diet has been manipulated so as to be beneficial for your dog. Then, see if you can find a product that offers the same

benefits *and* better-quality ingredients. The best example is a "kidney" diet for dogs with kidney failure. The goal is to feed these patients a diet with a moderate level of *very* high-quality protein and low amounts of phosphorus (see "When to Say No to Low-Protein," WDJ May 2005). An intelligently formulated home-prepared diet can do a *far* better job of accomplishing these goals than the commercial diets on the market.

You should also do some research on your own to determine what dietary changes might help your dog. A good starting place is Donald R. Strombeck's *Home-Prepared Dog & Cat Diets: The Healthful Alternative* (available by order in bookstores, and from Amazon.com and DogWise.com). Dr. Strombeck details strategies for changing the dog's diet to treat and/or prevent gastrointestinal, skin, skeletal and joint, renal, urinary, endocrine, heart, pancreatic, and hepatic disease.

Other diseases that can be improved with dietary management include:

- Allergy or intolerance. There are a number of breeds that are particularly susceptible to food allergies, including Cocker Spaniels, Dalmatians, English Springer Spaniels, Labrador Retrievers, Lhasa Apsos, Miniature Schnauzers, and more. Again, it's important to keep a record of what foods you feed your dog, what they contain, and how your dog looks and feels. If your records indicate that one or more ingredients trigger bad reactions in your dog, seek out foods that do not contain those ingredients in any amount. (See "Walking the Allergy Maze," August 2004 and "Diet Makes the Difference," May 2001.)
- Cancer. High-fat, low-carbohydrate (or carb-free) diets are ideal for cancer patients. Cancer cells use carbs for energy, and don't easily utilize fat, so you can effectively "starve" the cancer cells while providing extra energy to your dog with a diet rich in a high-quality fat sources. (See "Feed the Dog, Starve the Cancer," November 2003.)

Keep a Health Journal for Your Dog

Nobody likes to do it, but if your dog suffers from chronic or intermittent health problems, keeping a record of his diet and symptoms will be invaluable for determining whether there is a link between his diet and his condition.

I'm a believer in keeping a diet journal because I was able to "diagnose" my itchy, scratchy Border Collie's intolerance of chicken only after months of keeping "Rupert's Health Journal." I listed the foods I gave him and their major ingredients, and noted outbreaks of increased or renewed itching, ear infections, and even the dates of his rare sessions of obsessive paw-licking. I changed his food several times, including about four weeks I had him on a home-prepared diet based on raw chicken. *That* period was a total disaster; he lost so much weight that even my family started asking me what the heck I was feeding the poor dog, and his itching got worse. I had a bald scarecrow of a dog for a while, and yet some folks I knew kept insisting that he was going through a "detox" and would turn the corner soon. I went back to a commercial diet before we got to the particular corner to which they referred.

About six months into the project, I happened to switch Rupert's food to a beef and barley diet . . . and slowly but dramatically, his hair grew back, he put on weight, his ears cleared up, and he stopped scratching. That's when I sat down and went through Rupert's journal and noticed for the first time that every single food I had given him in the previous six months had contained chicken – raw chicken, cooked chicken, and/or chicken meal. Chicken simply was not good for Rupert.

You may be smarter or faster than I was at making the connection between certain ingredients and your dog's health problem, but you won't know for sure unless you write it all down: the date, your dog's health problems and assets, results of veterinary exams or tests, the type of food you are feeding him, and the food's major ingredients and macronutrient levels (percentage of protein and fat).

Then, periodically look through the data for trends. Did your dog's energy and coat quality go down when you switched to that "diet" food? He probably needs a food with a higher percentage of fat. Did some types of food seem to trigger diarrhea that persisted for days, and only went away when you switched to another food? Look for ingredients or macronutrient levels that these problem-causing foods have in common, and adjust your next dog food purchase accordingly.

What's the "Best" Food? I Can't Tell You That!

For reasons I can't quite figure out, many of our readers want to be told which food to feed their dogs. Never mind that I keep repeating that people should *switch* foods periodically, at least two or three times a year. Never mind that I keep saying that you should feed each individual dog as an individual. People call me and beg me to tell them which food is the best.

After years of being asked, I have a kind of standard speech about this; even my 13-year-old son can recite it. There is no "best" food for all dogs; it's an individual matter, I say. What's great for my dog might make your dog *horribly* fat, or set off his allergies, or aggravate his pancreatitis, I say dramatically. Only *you* have the access to your dog that will enable you to try different foods and see how he responds! You have to try foods, note his response, and adjust accordingly.

People are often disappointed by this speech. They don't want to hear "try this" and "try that." They want an answer! But I don't want some poor dog out there for the rest of his life, eating a food that really doesn't work for him just because I told his owner that it was a good food!

Then there are the people who will try to *trick* information out of me. I'll give them my speech, and then I'll hear them switch gears. "Okay," they'll say with convincing resignation. "I understand. That's fine. But out of curiosity, what food do you feed *your* dog?"

It gets worse! About a year ago, a really fine little pet supply store opened in my town. Previously, there was only one large chain pet supply store, and it carries mostly a selection of foods that doesn't meet WDJ's selection criteria. In contrast, Dog Bone Alley stocks its shelves with some great foods – every one of them a winner in my judgement. I was in the store one day picking up some cat food when Julie, who works there, said to me, "Hey, there was a guy in here recently who asked me to ask you what kind of food you feed your dog. I told him I would ask you and call him back."

My husband, who happened to be with me, answered seri-

ously, "Mostly he eats stuff that we drop on the floor!"

Ignoring him, I asked Julie, "What brought that up? Who was this guy?"

Julie told me that the man had spotted a stack of copies of Whole Dog Journal, which the store was selling. He said to Julie, "Oh my goodness! You carry WDJ! I *love* that magazine; I subscribe to it!" Julie told him, "The editor lives here in town; she comes in the store all the time!" That's when he said, "I live in Louisiana; I'm just out here visiting friends. I had no idea this is where Nancy Kerns lives. Would you do me a huge favor? I've tried to find out which food she feeds her dogs, but she won't say. Could you ask her sometime? I'll leave my number and you can call me!"

For the record, my dog Mokie has eaten every food on our "approved" lists – canned, dry, and raw. I'm lucky; he seems to be able to eat anything and everything – including, as my husband says, whatever we drop on the floor – without any sort of digestive or allergic problem. I feed him food from the kitchen and whatever comes into the office that meets my criteria. When there is nothing in my office, I go to Dog Bone Alley and grab anything they sell.

I wasn't so lucky with Rupert. In his geriatric years, he grew very intolerant of any food that contained chicken; he'd break out in fits of itching and scratching after just one serving. So I rotated him between a beef/barley food and a buffalo-based food. Toward the end of his life, he developed kidney failure and lost his appetite, so we went to high-quality canned foods. At the very end, he'd eat only really crummy sugar-filled junk canned foods. At that juncture, you feed them anything they will eat.

The point is, you have to take all the individual factors into account (your dog, your budget, your location), buy a product that's in the top echelon of quality, watch for symptoms that may indicate allergy or intolerance, and adjust accordingly. Then give yourself a pat on the back. With that, you've done about 90 percent more for your dog than most people do.

■ Inherited metabolism disorders. Some breeds are prone to diseases with a strong dietary influence. For example, the West Highland White Terrier and the Cocker Spaniel have an inherited tendency to suffer from copper buildup in the liver; these dogs should eat a diet that is formulated with low levels of copper. Malamutes and Siberian Huskies can inherit a zinc metabolism disorder, and require a high-zinc diet (or zinc supplements).

Ask your veterinarian (and reliable breeders) about your dog's breed-related nutritional requirements. And contact the manufacturer of your dog's food for the expanded version of the food's nutrient levels. Pet food makers are not required to print the levels of every nutrient on their labels, but should make this information available to you upon request.

Caloric considerations

Another thing you have to consider is the caloric content of the food you choose. If the food you select for your dog is energy-dense, and your dog is a couch potato, you may have to cut her daily ration considerably to prevent her from getting fat. Some dogs respond to forced dieting with begging, counter-surfing, and garbage-raiding. If your dog is one of these, you may have to seek out a high-fiber, low-calorie food – one that may not necessarily contain the highest-quality protein or fat sources on the market – to keep your dog feeling contentedly full without getting fat.

Dogs exhibit a wide range of energy requirements. You may have to seek out a higher- or lower-calorie food based on the following attributes that can affect your dog's energy needs:

- Activity level. The more a dog exercises the more energy he needs to consume to maintain his condition; it's that simple.
- Growth. Growing puppies have higher energy requirements than adult dogs. A food with a higher protein level, but a moderate (not high) fat level is ideal. Obese puppies are far more prone to degenerative joint disease especially in large and giant breeds than puppies with a normal or slim physique.
- Age. The age at which a dog becomes a senior citizen varies from breed to breed, with larger dogs considered geriatric at earlier ages. Older dogs typically require fewer calories to maintain their body weight and condition, partly because they tend to be less active than younger dogs.

- Environmental conditions. Dogs who live or spend much of their time outside in severe cold temperatures need from 10 percent to as much as 90 percent more energy than dogs who enjoy a temperate climate. The thickness and quality of the dog's coat, the amount of body fat he has, and the quality of his shelter have direct effects on the dog's energy needs.
- Illness. Sick dogs have increased energy needs; it takes energy to mount an immune response or repair tissues. However, dogs who do not feel well also tend to be inactive, which lowers their energy needs.
- **Reproduction.** A pregnant female's energy requirement does not increase significantly until the final third of her pregnancy, when it may increase by a factor of three.
- Lactation. A nursing female may require as much as eight times as much energy as a female of the same age and condition who is not nursing.
- Neutering. It is generally accepted that neutered (and spayed) dogs have reduced energy needs. However, there are actually no studies that conclusively prove that neutered dogs require fewer calories simply as a result of lower hormone levels. It has been suggested that these dogs gain weight due to increased appetites and/or decreased activity levels.
- Other individual factors. Other factors that can affect a dog's energy requirement include its temperament (nervous or placid?) and skin, fat, and coat quality (how well he is insulated against weather conditions).

Human factors

Finally, there are the human factors that may influence your dog-food purchasing decision, such as cost and local availability. Understand that there *is* a connection between the quality of an animal's food and his health, and do the best you can do.

It's also worth considering the reliability, responsiveness, and availability of the manufacturer's customer service people. It can be frustrating and costly if a company makes terrific food, but you can never reach them, your direct-ship order is regularly late, or the customer service people are either rude or unhelpful. Today, there are too many companies doing a good job and making good food to put up with this.

A Condensed Dog Food Buying Guide

Look for:

Foods that contain whole beef, chicken, turkey, lamb, pork, etc., and meals made of those whole meats (beef meal, chicken meal, turkey meal, etc.) such as

Chicken Soup for the Pet Lover's Soul and Merrick Pet Food's Cowboy Cookout

Products that contain whole grains, vegetables, and fruits, such as **Burns**, **Canidae**, **Innova**, **Pinnacle**, **and Prairie**

Foods with as much animal protein in them as possible . . . and, necessarily, manufacturers who will disclose and verify the percentage of animal protein in their formula, such as **Innova**

Evo and Petcurean's Foundations

Products with organic ingredients, such as Organix, Newman's Own Organics, and Karma

Good quality foods that are widely available at a reasonable price, such as **Precise, Royal Canin Natural Blend, and Wellness**



Do Not Buy:

Foods that contain low-quality ingredients such as "animal fat," "animal digest," or "meat meal," such as **Purina Dog Chow, Cycle, and Gravy Train**



Products whose protein is derived almost completely from "meat byproducts," such as **Cesar and Alpo**

Products lacking understandable expiration dates, or those that are close to or past their expiration dates

Foods containing artificial colors, such as **Purina's Beneful and Science Diet's Nature's Best**

Products containing "meat and bone meal," a very low-quality protein source, such as **Pedigree Complete Nutrition and Dad's**

Foods that are sweetened to tempt dogs' appetites (dogs should not be eating added sugar!), such as **Kibbles 'n Bits and Purina Dog Chow Senior 7+**

The Bowl Game

How and why to use your dog's food bowl to your advantage.

BY PAT MILLER

ou may think of it simply as a convenient vessel, useful for keeping your dog's food gathered in one place, off the floor. Your dog probably has a very different perspective. For him, the bowl is likely to be a high value object of great import, especially if he's a hearty eater. In this magical dish, one or more times a day FOOD appears.

Mealtime carries great significance for most dogs. It can be fraught with excitement, arousal, and stress. A wise dog owner understands the importance of mealtime and uses it to her advantage. Your dog's feeding ritual can be used to reinforce good manners, practice deference exercises, and encourage a positive association with food, food bowls, feeding, and the presence of humans in the vicinity of his hallowed feeding vessel.

If you just dump food in his bowl and depositing it on the floor, you miss a golden training opportunity – and you might actually reinforce undesirable behaviors.



WHAT YOU CAN DO . . .

- Take advantage of mealtimes to train and reinforce appropriate behavior and give your dog a good association with your presence at his bowl.
- Make sure all family members and visitors understand the importance of positive food bowl associations.
- Carefully manage conflict around food bowls to avoid fighting between dogs or aggression toward humans.



Not all dogs are capable of eating peacefully right next to another dog, but these dogs understand that it's a rule at this house that there is no guarding or trading bowls allowed. If someone breaks the rule, they lose the balance of that meal.

Meals versus free feeding

I cringe internally when a client tells me she free-feeds her dog – that is, keeps the bowl on the floor filled with kibble all the time. I'm a strong believer in feeding meals for a number of reasons, in addition to the medical fact that a dog's digestive system is designed more to gorge than to graze. There are numerous advantages to feeding your dog specific amounts of food at specific times:

- You can monitor intake. If you feed meals, you'll know the instant Buster goes off his feed sometimes the first sign that he's not feeling well. If you just keep the bowl topped off, it may be a day or two before you realize he's not eating.
- You minimize your dog's opportunities to guard his food. If there's always food in the bowl, your dog might just decide he needs to protect his valuable resource and

the territory around it. If the food bowl is picked up when it's empty, the feeding zone becomes more neutral.

- You can utilize feeding time as training time. Teach him good manners and impulse control by reinforcing a "Sit/Wait" behavior while you place the bowl on the floor, then give him the cue to eat (see "Wait Training," next page).
- You can take advantage of feeding time to reinforce your role as the higher-ranking member of your social group. You can't be the "alpha dog" your dog knows you're not a dog but you *are* a member of his social group. The leader controls the "good stuff," and dinner is definitely "good stuff." If food is available all the time, your dog controls it. If you, as benevolent leader, choose to share some of *your* food with him out of the goodness of your heart, and he performs a deference behavior such as sit

or down to get you to share, you're reinforcing a healthy relationship.

- You know when he's full, and when he's empty. Your training sessions are more likely to be successful if you train when your dog's stomach is empty rather than full.
- You can use his meals as training treats. This is particularly useful for building a relationship with a dog who's not convinced he needs you. If all good things, including meals, come directly from your hand, he's more likely to decide you're important in his life.
- You can control your dog's weight. Is he looking a tad too prosperous? Cut back a few calories from his portions. Looking a little ribby? Add an extra half-cup to his bowl.
- You may spark his appetite. People with fussy eaters often make the mistake of leaving food out constantly. The dog grazes all day and never gets hungry, thus never gets eager for food. Offering food, leaving it down for 10-15 minutes, then picking it up, can teach a picky eater to take advantage when he can, or wait for the next meal.

If you have multiple dogs, free-feeding

can be even more problematic. One dog may eat more than his share and plump up, while another dog goes hungry. You're even *less* likely to notice if one dog is off his feed, since the other is still eating and the food's still disappearing. Tensions may escalate around the bowl, and fights can occur.

Of course, there are plenty of dogs who can share food resources amicably. Yours might share nicely, but you still miss out on all the other benefits of meals.

The feeding ritual

There was a time when trainers recommended following routines that supported the status of the higher-ranking dog in the pack. Feed the "alpha dog" first, they said, and move on down the line. That thinking has changed.

Since I'm the highest-ranking member of the social group in my home, I get to make the rules, and I can decide if the rules change. Today, I might choose to feed a lower-ranking dog first, and move up the line. Or start in the middle, and move toward the ends. Or randomly select appropriate behaviors to reinforce with the food bowl. Of course, since we now know that pack hierarchy is more fluid than once thought, I might be guessing wrong about which dog has the highest rank on any given day, but that doesn't matter. I'm still the

leader, and I get to decide with whom I share food, and when.

In my canine group, Katie the crazy Kelpie often obsesses about Tucker moving toward his food bowl. She'll stand behind him and bite his hocks if he moves. To help him out, I may invite Katie to eat first so Tucker can walk to his bowl without torment.

Lucy, the year-old impetuous Corgi, is convinced she should always eat first, and can barely contain herself if I feed someone else before her. So, of course, I do, so she can practice her self-control lessons. If she waits calmly on her mat, she may be next. If she's dancing and whining for her breakfast, her bowl is slow to arrive.

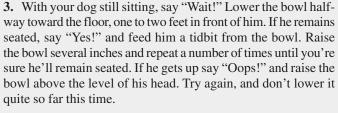
Katie, 13 and arthritic, and Tucker, who has bad knees, are no longer required to sit and wait for their bowls, but Lucy and Dubhy, the five-year-old Scottie, are still reminded each meal that good manners and deference behaviors make food happen.

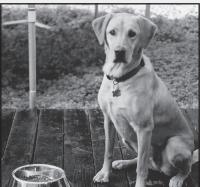
You get to decide what your particular mealtime rules are, but in general, chaos is not acceptable, and calm is good. Perhaps all dogs go to their respective place mats and wait for dinner to arrive. Maybe they just have to sit, lie down, or stand around quietly to make food happen. Whatever your desired doggie dinner behavior, you can reinforce acceptable behaviors by continu-

Wait Training

Mealtime is a perfect opportunity for twice daily "Wait" training sessions, using two principles of operant conditioning: positive reinforcement and negative punishment. Positive reinforcement (dog's behavior makes a good thing happen) occurs each time you say "Yes!" and feed a tidbit. Negative punishment (dog's behavior makes a good thing go away) happens every time he gets up and you put the bowl back on the counter or lift it out of his reach.

- 1. Have your dog sit at his designated dinner spot. Tell him "Wait!" If he remains seated, say "Yes!" and feed him one tidbit from his bowl (which you have placed on a counter).
- 2. With your dog still sitting, say "Wait!" and lift his bowl off the counter. If he remains seated, say "Yes!" and feed him a morsel (positive reinforcement). If he gets up, say "Oops!" and place the bowl back on the counter (negative punishment). Repeat until he stays seated when you pick up his bowl.





There's no better way to reinforce "Wait!" than with a highly anticipated meal. Look at that concentration!

4. With your dog still sitting, repeat the "Wait" exercise until you can lower the bowl all the way to the floor without him getting up. When he'll hold his sit with the bowl on the floor, tell him "Okay!" or "Get it!" and encourage him to eat.

Practice your dog's "Wait" training every time you feed him. You'll teach him a useful good manners behavior, and remind him at every meal that you're the benevolent leader, controlling the good stuff, but happily sharing with him as long as he offers a deference behavior (sit) and minds his manners.

ing with your meal preparations when dogs are calm. If dogs get too excited, take a seat and read a magazine until calm returns, then continue on.

When Dusty the intrepid Pomeranian was still with us, he was convinced that barking made food happen. This is a classic example of "superstitious behavior," where a dog believes that because a particular behavior – such as barking – occurred prior to an event of significance, that behavior can positively influence future outcomes, even though the two aren't really connected.

In Dusty's case we had to convince him that barking made food preparation *stop*, and *quiet* made food happen. We weren't entirely successful; ultimately we simply resorted to an outcome wherein barking made Dusty end up outside, and quiet brought him back in to eat.

Food fights

Food guarding is a natural, adaptive survival behavior for dogs. In the wild, if a dog doesn't lay claim to his valuable resources and defend that claim, he will likely starve to death. Wild canids who successfully defend their claims live to pass their genes on to their puppies.

While guarding from humans is a dangerous and unacceptable behavior, dogs

should be able to reasonably protect their food from their canine peers. "Reasonably" means *appropriate* use of body language signals – some posturing, a glare or two, maybe even a raised lip. It doesn't mean launching, lunging, biting, fighting, and/or causing punctures and lacerations.

If your multi-dog household erupts into all-out war during meals, it's time for a serious management plan. Depending on the intensity of the conflict, you can:

- Feed in opposite corners of the room and play referee making sure one dog doesn't approach or threaten another, and picking up bowls when dinner's over to remove the high-value, guardable object.
- Feed in opposite corners of the room and put all dogs on tethers to ensure they don't threaten each other.
- Feed in different rooms with closed doors or baby gates in between to prevent conflict.
- Feed in crates, far enough apart that guarding isn't an issue.

You may also want to try to modify the behavior. This is best done with the guarder

tethered, and a second person handling the other dog so the interaction is controlled, while working your way through the following series of modification exercises.

Modifying guarding behavior: SERIES #1

- Step 1: With you standing next to Guarder, have the other person walk Dog #2 into the far side of the room on a leash. The instant Guarder notices the other dog, start feeding Guarder scrumptious treats, such as tidbits of chicken. When the other dog leaves, the chicken stops. You may want to have your "other person" feed treats to Dog #2 as well, to keep her attention focused on her handler, away from Guarder.
- Step 2: Repeat Step 1 numerous times, until the presence of Dog #2 causes Guarder to look happily to you for bits of chicken.
- Step 3: Gradually bring Dog #2 closer, watching for any stress/warning signs from Guarder (see "Warning Signs of Stress," below).
- Step 4: Work at each new distance until you get a consistent "Where's my chicken?" response from Guarder, then decrease the distance another increment.

Warning Signs of Stress

It's important that you recognize subtle signs of food bowl-related stress in your dog, as these are the precursors to more obvious signs of aggression. The sooner you can recognize your dog's discomfort, the earlier you can intervene, prevent aggression from happening, and be more successful at modifying the behavior. Here are some subtle signs to watch for:

- As you approach your dog at his bowl he stops eating and freezes, with his muzzle still buried in his food.
- As you approach he gives you a "whale eye" with his nose still in his bowl, he rolls his eyes at you so you can see the whites around the edges.
- As you approach he eats faster.
- As you approach he blocks you with his body and keeps eating, or tries to push the food bowl away from you.

Growling, snapping, lunging, and actually biting are more obvious signs of food-guarding. Some dogs will leap to the obvious signs without giving you more subtle warnings. Punishing subtle warning signs will make him *less* comfortable, and may suppress those signs so he jumps right to lunging and biting. Remember that your goal is to make him comfortable with you approaching his food. You can best accomplish this through a systematic program that changes his association with your presence at his bowl from "Uh-oh, she might steal my food," to "Yay! More chicken!"



Using a fake hand on a stick, one can test a dog's potential to guard. Note his "whale eye," snarling, stiffening...



... leading to SNAP! "I warned you!"

SERIES #2

When Dog #2 can come close – say, within five feet of the end of Guarder's tether – without eliciting stress/aggression signals from Guarder, go back and repeat Steps 1 through 4 with Guarder's empty food bowl on the floor next to him.

SERIES #3

When Dog #2 can come close with the empty food bowl on the floor, repeat Steps 1 through 4, but this time drop the bits of chicken into Guarder's empty bowl instead of hand feeding them.

SERIES #4

When Dog #2 can come close with chicken bits dropping into the bowl, repeat Steps 1 through 4, but this time start with some of Guarder's regular food in the bowl on the floor, adding bits of chicken as Dog #2 approaches.

If you've done your work well, by the time you reach the end of Series 4, Guarder should understand that when Dog #2 approaches, it *makes good stuff happen*. Continue to referee off-leash interactions at feeding time, watching for the recurrence of stress signals from Guarder that may indicate more practice sessions are needed.

As with all aggressive behaviors, if you feel the risk to your safety (or your other dog's safety) is high, or your modification work doesn't improve the behavior, we recommend seeking the assistance of a qualified trainer/behavior professional.

Guarding from humans

Dogs who guard their food from humans are a significant threat. If the only thing the dog guards is his food bowl, manage the behavior by feeding him in a separate room, with the door closed, and inviting him out before you go in to pick up the empty bowl. If he generalizes his guarding to other high-value objects, the risk increases by leaps and bounds, especially if you can't predict what he may decide is valuable to him.

If you have a puppy, start early by associating your presence near his bowl with good stuff; drop yummy tidbits into his bowl as he's eating, so he doesn't feel threatened by your presence. Don't allow family members to tease or torment him at the food bowl, and if he does exhibit signs of guarding, *don't punish!* Punishment will only convince him that you're a threat to his food – you have to work harder to convince him you're not (see "Thanks for Sharing," WDJ September 2001).

About That Bowl ...

BY NANCY KERNS

I am sometimes shocked – shocked! – at the state of the dog bowls I've seen at some of my friends' homes. Some of the same folks who would turn pale at the sight of a dish in the cupboard that has dried food stuck to it think nothing of dumping their dogs' food in a nasty, greasy bowl day after day, month after month, or seeing green slime build up in the dogs' water dish. While the canine digestive system is capable of neutralizing virulent bacteria when a dog is healthy, when a dog's immune system is compromised, that bacteria can overwhelm his defenses and make him one sick pup, indeed.

If your dog has periodic or persistent digestive problems such as diarrhea or vomiting, try washing his dishes, daily, with hot water and soap, allowing them to air-dry, and see if that helps. Wait a minute! What am I saying? *Everyone* should keep their dogs' bowls clean!

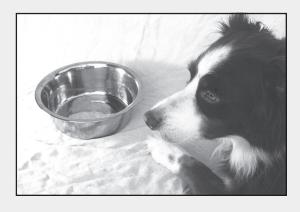
This advice goes triple for anyone who feeds their dog any sort or amount of raw meat, eggs, or dairy products, which can come from the supermarket infested with potentially lethal *Campylobacter, Clostridium Perfringens, Salmonella, Listeria,* and other bacteria. Fortunately, most people who have learned enough about canine health to feed their dog a raw diet also have learned about the importance of proper food preparation and sanitation techniques.

MATERIALS MATTER

The easiest type of bowl to keep clean – and, not incidently, also the safest bowl for your dog to eat and drink from – is stainless steel. This material will not leach potentially dangerous chemicals into your dog's food and water, like some plastics, aluminum, poorly glazed pottery, or old ceramic dishes. Stainless steel and glass bowls are similarly inert, but stainless steel wins in my house, due to its durability on the floor and in the sink.

For the dog's water dish I like to see a shining clean stainless bowl that is scrubbed and air-dried at least a couple times a week – which means you should have more than one of them, to rotate in and out of use. I especially hate to see plastic bowls regularly used to contain a dog's water. Recent studies have indicated that polycarbonate plastics, often used in the manufacture of food and drink packaging and containers, can emit at least one chemical, bisphenol A, that can disrupt the hor-

mone systems of lab animals, affecting their brains. Phthalates, substances used to soften plastic, are another class of worrisome chemicals that have been shown to cause hormone and nerve damage in children. It's incredibly easy to avoid these things by buying inexpensive, durable, easy-to-wash, stainless steel bowls for your dogs, so why don't you?



Jean Donaldson's excellent book, *Mine!*, offers a step-by-step program for modifying food-bowl guarding, but again, we advise you to heed the warning: If you feel the risk to your safety is high, or your modification work doesn't improve the behavior, we recommend seeking the assistance of a qualified trainer/behavior professional.

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. Miller lives in Hagerstown, Maryland, site of her Peaceable Paws training center. For book or contact information, see "Resources," page 24.

Miraculous Moms

Pregnancy, whelping, and lactation.

BY RANDY KIDD, DVM, PHD

iven the incredibly intricate and complex series of events that need to occur to produce living puppies, it is almost miraculous that any pups are ever born, but they are. And, more often than not, nature doesn't seem to have many problems with the process. Following are some explanations for what goes on during and immediately after pregnancy.

The length of pregnancy in dogs is a remarkably consistent 64 to 66 days – *if* we measure from the surge of luteinizing hormone (LH) that triggers ovulation. However, most pregnancies are not monitored by measuring blood hormonal levels, and if we start counting the days from a single mating, pregnancy may vary from 56 to 72 days – 63 days is the traditionally accepted norm.

Pregnancy can be diagnosed by manual palpation between days 20 and 35, but this method relies on the skill and experience of the one doing the palpation and his or her ability to discern discrete uterine enlargements (fetuses) from other lumps that occur in the abdominal cavity – the bladder, kidneys, and fecal accumulations



WHAT YOU CAN DO . . .

- The production of robustly healthy puppies starts months and years before their birth. Build the mother's health to optimal levels before breeding.
- Keep the mother's stress levels to a minimum during pregnancy.
- Use the homeopathic remedy pulsatilla to help maintain a healthy pregnancy, smooth the whelping process, and assist nursing.



Breeders love females who produce healthy puppies and then nurse and tend them calmly and diligently, without being overbearing or overprotective. Research has shown that the offspring of these well-adjusted females tend to be mentally healthy as well.

in the colon, for example. After day 25, ultrasound is effective.

Your veterinarian can take a blood sample and run an in-office test (serum relaxin assay) after day 30 to confirm pregnancy. Relaxin is a hormone that facilitates the birth process by causing a softening and lengthening of the cervix and the pubic symphysis (the area where the pubic bones come together). Relaxin also inhibits contractions of the uterus and may play a role in the timing of delivery.

Toward the end of pregnancy the female will begin to produce milk (usually at about day 45), and many will begin to make a "nest." During the 24 hours just prior to parturition (also known as whelping), a female's progesterone level usually falls below the level required to support pregnancy (2 ng/ml), and this drop is responsible for a rectal temperature drop, to a mean of 98.8°F (range 98.1-100.0°F). Many breeders use this fall in temperature to predict whelping.

Environment's importance during pregnancy

There are at least three outside variables that influence the intended outcome of healthy pups – variables that the bitch's caretaker can influence: nutrition, nurturing, and paying attention to the healthy history of the parents.

Nutrition is especially important. There are many studies that demonstrate the necessity of adequate basic nutrition during pregnancy, and studies that prove that inadequate nutrition results in smaller, less healthy offspring who have a propensity for developing a variety of diseases later in life.

During the first four weeks of pregnancy, the fetuses don't have a lot of weight gain; the mother's caloric intake should be monitored to keep her from gaining weight during early pregnancy.

The Association of American Feed Control Officials (AAFCO) recommends a minimum of 22 percent protein and 8 per-

cent fat in the diets of pregnant and lactating females, especially during the last half of pregnancy. (Comparable figures for the "adult maintenance" diet are 18 percent protein and 5 percent fat.) According to AAFCO, pregnant females have the same needs for vitamins and minerals that adult dogs require for maintenance.

Finally, and perhaps most importantly, implicit in any list of nutrient requirements is the absolute need to balance the nutrients. This is the biggest problem I see in the homemade diets used by my clients. For one reason or the other – usually it is something like, "Well, he just doesn't like the veggies!" – folks will eliminate an important component of the diet, and by doing so, their home-prepared diet is no longer adequately balanced.

Scientifically backed evidence for the importance of **nurturing** during pregnancy is a bit more difficult to come by, but we do know that there are some negative factors that adversely affect the health of the dam's offspring. We know, for example, that excess stress (or the use of therapeutic corticosteroids) has a negative effect on the uterine environment; too much stress dur-

ing development can produce puppies that are difficult to socialize, and too heavy a load of corticosteroids can actually cause abortion.

We also know that moderate exercise during pregnancy is good for the development of healthy neonates. And, for the good of the neonates (and the bitch) it just makes sense that we try to provide a calm, loving, and healthy environment during the entire development period of the puppies.

Every bit as interesting, from the holistic standpoint, is that recent studies have proven the importance of **maintaining optimal health in the dam.** It has been shown that a number of disease states can be transferred directly from the dam (or from several generations back), *without* being genetically transferred. "Prenatal programming" has been shown to occur in a variety of animals, including humans, and it involves the passing on of several diseases.

During fetal development, there are critical periods of vulnerability to "suboptimal" conditions, and if the bitch is living under one of these conditions, the likelihood of passing on disease to her offspring is increased. But even more interestingly, the

likelihood of problems being passed on to future generations – grand-puppies, great-grand-puppies, etc. – may also be enhanced.

Conditions in the dam that result in proven problems for future generations include obesity or malnourishment, excess stress (or exposure to corticosteroids), diabetes, and asthma. It has recently been shown (in humans) that exposure to second-hand smoke may create an added propensity for asthma in the grandkids of the smoker – whether or not they, or their mothers, were smokers themselves.

This is ongoing and fascinating research, and it lends credibility to the folks who want to raise puppies naturally, for the sake of many future generations. It's my guess that we'll continue to find connections to the health of the dam during pregnancy and the health of many future generations of her puppies. This puts me in mind of the Native American understanding that we need to be concerned about seven generations back and seven generations forward.

Labor and delivery

During the 6 to 24 hours before birth of the first pup, behavior changes in the bitch may

Accurate Due Dates Are Important for Complete Preparation

A great majority of all pregnancies in dogs end happily and without a problem. However, there are some individual dogs and especially some breeds that we can predict will have problems, and these individuals may need some advance preparation to insure healthy puppies. Prime examples here are those unfortunate brachiocephalic breeds (such as Bulldogs) that almost always require a C-section to deliver live pups.)

While the usually accepted 63 days of pregnancy is a fairly good time frame to keep in mind, estimating a true delivery date involves several variables. For some individual females, the delivery of healthy, full-term puppies may depend on accurate prediction of the true due date, because:

- There are no means to effectively manage prematurely born puppies, making premature intervention in the whelping process undesirable:
- an excessively conservative, wait-and-see approach may result in fetal death, an equally undesirable outcome; and
- as yet there have been no safe and predictable methods for inducing labor (parturition) in canines.

Breeding dates and conception dates do not correlate closely enough to permit accurate prediction of whelping dates. Here are some of the problematic variables affecting the length of gestation in bitches:

- The bitch may exhibit estrual behavior (acceptance of the male) for several days on either side of the date of ovulation. Using the behavior of the bitch as a "timing device" could result in an expected length of gestation of from 58-72 days from the first instance that the bitch permitted breeding.
- Conception (union of sperm and ovum) can occur over several days.
- The length of time semen can remain viable in the reproductive tract is variable (up to 7 days), further confounding prediction dates that rely on the time of breeding.
- Clinical signs of term pregnancy are not specific; radiographs of fetal skeletal mineralization varies at term and fetal size varies with the breed (of both dam and sire) and litter size.
- The bitch's breed, the number of times she has been pregnant (parity), and litter size can also influence gestational length.

Following blood hormonal changes and other physical changes (such as the timing of vaginal cellular changes) can be extremely helpful (see "Girl Talk," in the June 2005 issue). Gestation in the bitch is 56 to 58 days from the first day of diestrus or 64 to 66 days from the initial rise in progesterone from baseline, a time that generally corresponds to the shortlived (usually about 24-48 hours) LH surge.

include becoming reclusive, intermittently digging and nesting, panting and shivering, refusing to eat, and/or vomiting. Her vaginal discharge is clear and watery. This phase of normal labor, termed Stage I, is characterized by muscular contractions of the uterus that increase in frequency and strength, and dilation of the cervix.

Stage II labor is marked by visible abdominal contractions that reinforce the efforts of the uterus in delivering the pups. Puppies may be born one at a time with a period of rest between each puppy, or several may be born relatively quickly.

Pups may be delivered within intact membranes or attached to ruptured membranes. Membranes and placenta are typically eaten by the bitch; vomiting of placental material is common. We once thought that it was important for the bitch to eat her placenta, a rich source of nutrients and a source of the hormone oxytocin, which is necessary to help expel the placentas and to instigate milk flow. Later we learned that oxytocin is destroyed in the stomach, and most of the stimulation for oxytocin release comes from nursing puppies.

Overly aggressive or overly concerned mothers may puncture the abdominal wall while attempting to chew through the umbilical cord. Calming flower essences or homeopathic remedies may be helpful here. Severed umbilical cords can be painted with tincture of iodine to help prevent infection.

Vaginal discharge during active labor can be clear to hemorrhagic (bloody), or green (uteroverdin or biliverdin is a green pigment that comes from the breakdown of



Breeders often place lightweight, colorcoded collars on the pups to identify similar-looking individuals for the purposes of tracking their weight gain.

hemoglobin in the blood of the placenta).

The interval between puppies (whether singletons or several-in-a-row) is generally less than 30 minutes, but it can vary from 15 minutes to several hours. Typically the bitch will continue to nest between deliveries and may nurse and groom puppies intermittently. Panting and trembling are common, and most laboring bitches refuse food. A litter of 6 to 8 pups can require 4 to 18 hours or more; however, a normal and healthy delivery is typically associated with shorter total delivery time and shorter intervals between puppies.

Uterine inertia is treated by administering oxytocin and/or calcium-containing fluids; alternately homeopathic or herbal remedies or acupuncture treatments may be used to hasten a slow delivery.

During Stage III labor, the remaining placentas are passed. Most bitches vacillate between Stage II and III until the delivery is complete – that is, puppies and placentas are usually delivered alternately, with no set pattern of delivery.

Preventing problems

Encourage your pregnant female to deliver in a familiar area where she will not be disturbed. Unfamiliar surroundings or strangers may impede delivery, interfere with milk letdown, or adversely affect her maternal instincts. This is especially true with young or primiparous animals (bearing or having borne but one litter). A nervous dam may ignore the neonates or give them excess attention. A dam's apprehension or nervousness may subside in a few hours, but in the meantime the pups must receive colostrum and be kept warm.

It is normal for a female to have a reddish-brown to black odorless discharge (called lochia) for a few days to several weeks after giving birth. Some folks may want to have their vet palpate or X-ray the female to ensure that all pups have been delivered. The neonates should be weighed accurately (cooking or postal scales that weigh in ounces are effective) as soon as they are dry and then daily for the first week. Any weight loss after the first 24 hours could indicate a serious problem – supplemental feeding, assisting the bitch with nursing, or evaluation for possible infection or other problems may be indicated.

Although times may vary, obvious mammary development usually occurs by day 45 of pregnancy, and obvious milk secretion normally begins at or after parturition. Suckling induces the release of hormones

necessary for inducing lactation, including oxytocin and prolactin. Lactation lasts about six weeks, with the dam encouraging weaning beginning at about week four or five.

Producing milk increases the bitch's caloric needs three to four times. During the last few weeks of lactation, she may also need calcium supplementation, which can be provided with cottage cheese or yogurt or a balanced vitamin/mineral supplement.

Colostrum is the milk secreted during the first few hours after birth. It is nutrient-rich, and contains whatever immunoglobulins the bitch is carrying at the time. It is thus the source of the puppies' immunity to infectious disease for the first several weeks of life. For this reason, it is very important to insure that all pups receive an initial feeding of colostrum within a few hours after birth. Also, the production of colostrum may last for a few days, but the pup's ability to absorb it may only be hours long.

Feedings will begin at every few hours, throughout the day and night, and gradually decrease in frequency. By the third week, pups should be introduced to a supplemental food source. If they are going to be fed commercial food, their first "mash" should be a mixture of milk replacer, puppy food, and water, blended into the consistency of human infant cereal. In the same time frame, people who feed their dogs a home-prepared diet will start offering the pups raw, meaty bones to lick and chew. (See "Raw-Fed Puppies," WDJ December 2003.)

Problems of pregnancy, labor, and lactation

The most important cause of **abortion** in dogs is brucellosis, which has been discussed in past installments. Other causes of abortion run the gamut and include a variety of infectious agents, an improper uterine environment (inadequate nutritional level, for example), and trauma.

False pregnancy (pseudopregnancy, pseudocyesis) is a fairly common occurrence in dogs, making intact and even some spayed females look and act like they are pregnant when they are not. These females may exhibit mammary development and even produce milk, and may demonstrate "mothering" behaviors such as nesting and treating toys as if they were living pups.

Most vets recommend no treatment because the condition usually resolves itself in one to three weeks; the only drug currently approved for treatment of false pregnancy (the progestin, megestrol acetate) may cause pyometra. If the mammary glands seem painful, alternating cold and warm compresses may alleviate the discomfort. For the overly anxious bitch, consider herbal tranquilizers, homeopathic remedies, and/or calming flower essences.

Dystocia is the term used to describe abnormal labor or parturition. It can be caused by uterine inertia, pelvic canal abnormalities, oversized or poorly aligned fetuses, or any combination of these. Uterine inertia that develops after the delivery of one or more neonates (secondary inertia) is the most common cause of dystocia.

Treatments include calcium and oxytocin. Note that it is important that the timing and dosage of these drugs is critical to their success. Alternative treatments include homeopathic remedies and acupuncture.

Neonatal deaths are not uncommon for puppies kept under even the most stringent levels of care; reported average neonatal mortalities range from 15 to 25 percent.

The most common metabolic disease of the postpartum bitch is eclampsia; common inflammatory diseases include metritis (often from a retained placenta or fetus) and mastitis. Eclampsia (also known as puerperal hypocalcemia, postpartum hypocalcemia, periparturient hypocalcemia, and puerperal tetany) is an acute, life-threatening condition seen at peak lactation, two to three weeks after whelping. Small breed bitches with large litters are most often affected. Hypocalcemia may also occur during parturition and may be a cause of dystocia.

Supplementation with oral calcium during pregnancy may actually predispose to eclampsia during peak lactation; excessive calcium intake during pregnancy causes a down-regulation of the calcium regulatory system, which can subsequently produce clinical hypocalcemia when calcium demand is high.

The typical bitch affected with eclampsia has been healthy during early lactation, and the neonates have been thriving. Early clinical signs of eclampsia include panting and restlessness. Mild tremors, twitching, muscle spasms, and gait changes (stiffness and ataxia) result from increased neuromuscular excitability. Behavioral changes such as aggression, whining, salivation, pacing, hypersensitivity to stimuli, and disorienta-

tion are frequently seen. Bitches may become hyperthermic from panting and tremors, and increased heart rates, excessive drinking and urinating, and vomiting may occur. Severe tremors, tetany, generalized seizure activity, and finally coma and death may occur.

Eclampsia can be difficult to differentiate from other diseases (such as hypoglycemia, epilepsy, encephalitis, or toxicosis), so whenever the bitch appears to be having nervous system symptoms, alert your vet. Intravenous calcium therapy should produce muscular relaxation and clinical improvement within 15 minutes. Follow-up treatments will likely include more calcium administered subcutaneously, and then oral calcium and vitamin D supplementation.

Once a bitch has eclampsia, she is likely to have it again in subsequent pregnancies. Prevention consists of an appropriate diet during pregnancy and lactation – that is, a high-quality, nutritionally balanced diet with no additional calcium supplementation. Food and water should be provided without limit during lactation, and puppies

Vaccinating and Maternal Immunity

Puppies are born with an almost-clean immunological slate; they have very few antibodies protecting them from disease pathogens until they drink colostrum, the first "milk" produced by their mothers for a day or two after their birth. The puppies' bodies can't produce their own antibodies to disease pathogens until they are about six weeks old, so access to at least one feeding of colostrum in their first 24 hours of life is important. Of course, the mother can pass along only the antibodies she possesses. Vaccination is contraindicated during pregnancy, so a breeder must plan well ahead to optimally protect puppies.

Interestingly, access to a supply of canine colostrum doesn't do the puppies much good after about 24 hours. In the hours after birth, a pup's gastrointestinal tract goes through rapid changes, preparing for the work of digesting its own food. In the first day after birth, the colostrum's antibodies – which are large protein molecules, also called immunoglobulins – are absorbed through the mucosal lining of the GI tract. Around 24 hours this permeability ceases, and antibody molecules can no longer can be absorbed but are subject to normal digestive processes. Again, this makes the puppy's access to the mother's colostrum in the first 24 hours very important.

The immunity conveyed via the colostrum, called "maternal immunity" or sometimes "passive immunity," usually lasts for several weeks in the puppy's system but gradually fades as the puppy's own immune system begins developing and becomes capable of producing its own antibodies, around 14 to 16 weeks. The exact time of the maternal immunity's fading is *highly* variable, but it generally occurs between 6 and 16 weeks. The goal

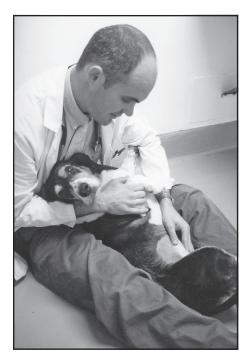
of vaccination programs is to cover any "gap" in immunity by administering vaccines immediately after the maternal protection fades and as soon as the puppy's body is capable of producing its own antibodies in response to antigens.

Vaccines are given to puppies several times in order to cover the "gap," as variable as it may be. They are *not* repeated because more vaccines are better or because it takes several doses of vaccine to "boost" the immunity to protective levels; neither of those things are true.

Remember, vaccines are weakened or killed disease antigens. If vaccines are administered to a puppy whose maternal immunity is still strong, the immunoglobulins he received from his mother's colostrum will destroy the antigenic material in the vaccines; this so-called "maternal interference" renders the vaccine useless.

But at some point, the maternal immunoglobulins fade, leaving the puppy without protection from disease antigens. Vaccines given at *this* time prompt the puppy's maturing immune system to produce its own protective antibodies against the diseases. A vaccine titer test, administered to a puppy a few weeks after vaccination, can confirm whether he was successfully immunized. (See "Take the Titer Test," December 2002.)

In any event, if you choose to vaccinate your female dog, you must do so before she is pregnant; there are too many potential problems associated with vaccinating during pregnancy. Discuss with your holistic veterinarian the overall and long-term advantages and disadvantages to vaccinating while you are planning for your dog's pregnancy.



Surgical excision is the best treatment for mammary tumors, but they can recur. Early spaying prevents most cases.

should be supplemented with milk replacer early in lactation and with solid food after three to four weeks of age. Calcium supplements may be appropriate for the bitch during peak milk production, especially for one with a history of eclampsia.

Homeopathic veterinarians have reported some success preventing eclampsia by using a low potency of one of the calcium salts during the later stages of pregnancy and up through lactation.

Corticosteroids lower serum calcium, and may interfere with calcium intestinal absorption and increase urinary calcium loss. Thus, for several reasons they are contraindicated at any time during pregnancy and lactation.

Mastitis is inflammation of the mammary gland(s) associated with bacterial infection. It may be localized in one gland or within multiple glands, and is caused by a number of bacteria, commonly *E. coli* or *staphylococcal* species. Conventional treatment consists of antibiotics; realize that whatever antibiotics used will appear in the milk and be ingested by the puppies. Alternative treatments include acupuncture, homeopathic, and herbal remedies. (Homeopathic remedies and acupuncture have both been shown to be effective when treating dairy cows, a species where mastitis is very common.)

Prolonged delivery, dystocia, and/or retained fetuses or placentas may lead to

metritis, infection of the uterus. There is usually a purulent discharge from the vagina, and a variety of bacteria have been isolated from infections. Affected bitches are usually depressed, feverish, and lethargic, and they may refuse to eat. Pups may also show signs of restlessness, and they may cry incessantly. Metritis can lead to severe systemic illness that requires stabilization of the bitch with fluids along with antibiotics and other supportive care.

Pyometra is a hormonally mediated disorder characterized by cystic growth of endometrial tissue with secondary bacterial infection. It is reported primarily in older bitches, more than five years old, and it typically occurs four to six weeks after estrus. It is often associated with the administration of long-lasting progestational compounds that are used to delay or suppress estrus, or to the administration of estrogens meant to cause abortion in mismated bitches. Infections after breeding may also be a cause.

Symptoms are variable and may include lethargy, refusal to eat, dehydration, and excessive drinking and urinating. Sometimes the cervix is open during the infection, and in this case there will be a mucopurulent vaginal discharge; if the cervix is closed, there will be no discharge. Only about 20 percent of affected bitches run a fever, but some go into shock. The results of a complete blood count can vary. The kidneys may indicate temporary signs of failure. Ultrasound or radiography will confirm the condition.

Pyometra is common enough that it should be considered any time an illness exists in an intact female, especially if the illness occurs about a month after estrus or after employing hormone treatments. Ovariohysterectomy is the treatment of choice; medical management is possible, but it may prove to be difficult and costly.

Mammary tumors are a common occurrence in female dogs – about three times more common than in women. They comprise about 50 percent of all tumors that occur in female dogs. The exact mechanism of their causation is unknown, but hormones may play an important role. Obesity has been implicated as a contributing factor.

Mammary tumors are most frequent in intact bitches. Ovariectomy before the first estrus reduces the risk of mammary tumors to 0.5 percent of the risk in intact bitches; ovariectomy after one estrus reduces the risk to 8 percent of that in intact females. It is assumed that neutering the bitch after ma-

turity leaves her with the same risk as intact bitches, and although it is often recommended to spay the bitch at the time of tumor removal, the true impact of this recommendation is unknown.

More than 50 percent of canine mammary tumors are benign. However, since it is often difficult to determine the degree of malignancy of a mammary tumor, from a practical view, all of them should be treated as potentially malignant.

Surgical excision is the treatment of choice. Attempts at chemotherapy have not proven to be consistently helpful. Alternative remedies such as acupuncture and/or homeopathy have also been used, with variable success. Prognosis depends on several factors, including the size of the tumor, its spread to other tissues, and the potential for malignancy. Most mammary tumors that are going to cause death do so within a year.

Since mammary tumors can be lifethreatening, and since they are fairly effectively prevented by early spaying, this is one more reason to have your female dog spayed at an early age.

Alternative therapies

Acupuncture, homeopathic, and herbal remedies have been used for thousands of years to enhance pregnancy, ease the birthing process, stimulate lactation, and treat diseases of the female reproductive tract, the pregnant female, and the pups. Historically, many herbs have been used to cause abortion, so it is important to check with a holistic practitioner before using any remedy, natural or otherwise, during pregnancy.

Perhaps the Big Momma of all alternative remedies for pregnant females is the homeopathic remedy, pulsatilla. Practitioners use it to prevent premature birth, ease birthing, calm mothers during whelping, help pass placentas, and instigate lactation. I've been so impressed with it I routinely recommend it for all mothers – dogs, cats, horses, donkeys, pigs, etc. – at a medium potency of perhaps 30c three times, 12 hours apart, beginning shortly after birth or during birth if there is any difficulty encountered.

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



- ☐ JUNE '05 Which Vaccines Are a Must When It's Not Chronic Renal Failure Female Reproductive System Help for Hypothyroidism
- ☐ MAY '05 The Collar of Money Crate Difficulties Male Reproductive System
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- □ AUG '03 Safe Fun at the Beach Foxtails "Elizabethan Collars" and Alternatives
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First-Hand Knowledge

WDJ readers confirm the veracity of our reporting.

nyone who has ever had bloat or torsion occur in their dogs should know that it can happen more than once, even after surgery to "prevent" this from happening again (see "What Promotes Bloat?" January 2005).

I have a five-year-old, 136-pound Rott-weiler, in excellent condition and very firm and trim for his weight. In August 2004, after just arriving home from the normal vet visit, Micah drank a large amount of water, then had his normal one cup of kibble. Within minutes, he started to vomit. Nothing came up, and right before my eyes his stomach started to swell. After a quick call to the emergency clinic and my vet, and an immediate trip to the clinic, he was in surgery for bloat and torsion. They tacked his stomach – "so this would not happen again" – and he came home the next day.

Five months after his first surgery, Micah bloated again. I rushed him to the vet, and they rushed him into surgery. Later, they sent Micah to Cornell University's vet clinic due to his grave condition. He was in intensive care for eight days. The vets at Cornell told us that 95 percent of dogs never have torsion twice. Micah did.

Be on the look out for bloat and torsion, even if your dog has had a surgical procedure to prevent it from occurring again.

Gloria Treen and Katy O'Hora via e-mail

CRATES AND S.A.

was disappointed by "Crate Difficulties" (May 2005). I am a longtime dog owner/ trainer. My dogs have always been crate/ kennel-trained. I found your advise *not* to crate panicky dogs a cop-out and potentially an excuse for owners who have reached their limits with a dog that has separation anxiety (SA) to send them packing to a shelter or worse – the streets! I realize that the article was not about *how* to crate-train, it was about how to help dogs find contentment in their crates. For SA-stricken

companions, this is sometimes possible – not always, but sometimes. I have found the following simple steps to assist a dog with SA:

- Move the crate into a more central location where the family "action" is occurring (i.e., the kitchen), then place your puppy/dog inside with the door closed. While inconvenient for you to have to maneuver around, a few sessions of you preparing dinner or watching TV or folding the clothes while talking to the animal to keep her calm will allow the animal to understand that this is not a bad place.
- As the dog gets used to being inside, then the door may be left open so that the dog may enter/exit on will. Dogs like having a protected place to lie in while observing and being "near enough" to their humans.
- Crates can be progressively moved to less-chaotic areas of the house, but should never ever be in an isolated area and should always be available for the dog to take a nap.
- Dogs with SA often have a strong connection with their humans based on smell. The placement of a smelly piece of clothing into the cage can often work as not only an encouragement but a comforter.
- There are some pheromone-based solutions that come in a "plug-in" type form that are supposed to calm the dog.

Cathy Trent Chester, NY

Training Editor and article author Pat Miller responds:

Thanks for your crating suggestions. The steps you suggest are indeed helpful for dogs with mild anxiety, and are very similar to those we suggest in our crate training articles. We have also run articles that report positive results with the DAP/Comfort

Zone plug-in diffusers that you suggest, and I have used them myself, with success, for some dogs with stress- and anxiety-related behaviors (see "Please Appease Me," January 2004).

It has been my experience, however, that most dogs with full-blown separation anxiety *cannot* tolerate being crated, and that it takes far more than the simple steps you describe to help them accept close confinement. In most cases of serious SA, the anxiety disorder must be addressed before the dog can be crated. In those cases, crating is likely to exacerbate the dog's panic and make the SA worse.

There's a tendency in today's dog world to overdiagnose SA. Dogs who are mildly stressed about being alone, or those who become destructive when alone due to lack of house manners, can benefit greatly from crating, and it was not at all my intention to discourage crating for such dogs. My apologies if I seemed to do so. Rather, I encourage owners of dogs with destructive behavior and/or mild anxieties to try crating.

I do stand by my position, however, that it's inappropriate to crate dogs with a serious panic disorder, unless and until their anxiety is considerably lessened. I've seen dogs with serious SA who lost teeth from trying to chew their way out of a crate, and others who reduced their paws to bloody messes trying to dig out of a crate; nothing is to be gained by persisting in crating a dog with a panic disorder this strong.

WHEN IT'S NOT C.R.F.

can't express how much new information I have gleaned off the pages of WDJ. Your most recent article ("Not So Fast," June 2005) has really put my mind at ease and answered many questions that my vet did not concerning kidney disease. Here is my experience:

About three years ago, my Lab, Lexis (then six years old), went into what I thought was depression (her playmate had recently

died). The vet did a complete blood test and physical and the blood test came up with extremely high BUN. Right away my vet said Lexis had kidney failure and an infection somewhere. He prescribed antibiotics and a bag of Hill's k/d (kidney diet).

I took her back about a week later for another blood test and an ultrasound. The blood test showed the BUN levels going down. We continued with the k/d and finished the antibiotic. About another two weeks later we did another blood test and everything was normal.

I started having second thoughts about the prescription food and six months later I weaned her off it. Again I took her to the vet for another checkup and all her blood levels were very good. Only then did I tell the vet that I had taken her off the k/d!

It's now been almost three years since her initial diagnosis and everything is still good. She still gets blood tests every six months just to be sure no other problems arise. I am now convinced that she had some kind of renal or urinary infection, not renal failure, since she bounced back to her old self quickly.

> Erika Reising via e-mail

HYPOTHYROIDISM

our recent article on hypothyroidism ("Help for Hypothyroidism," June 2005) deserves recognition. As a certified dog trainer dealing primarily with aggression cases, I found your article to be the most complete and informative that I have ever seen. I have collected information on medical issues that contribute to behavior problems (especially the hypothyroidism issue) for years. This article clearly put together the threads of information that have been "out there" for years in bits and pieces. I am passing this article on to the vets that I work closely with. Julie Winkelman

Alpha Canine Academy, Durango, CO

Your article on hypothyroidism was almost a case study of Bari, our Golden Retriever. Through our own discovery of Dr. Jean Dodds via the Internet, we had him properly diagnosed with hypothyroidism in 2001 at age 21 months. Through daily thyroid medication, constant counter-conditioning, and daily medication for his seizures, we have an almost-normal dog. As your article mentioned, most vets don't have a clue

about aggressive behavior and its relationship to this disease.

We have been long-time subscribers of WDJ and in the early days scoured every issue from top to bottom in hopes for information like this. Even though the article wasn't timely for us, the article will, I hope, help others like us that are currently looking for answers.

> Nancy and John Evenden via e-mail

VACCINATIONS

aving lived with a vaccine-damaged dog for the past seven years, it breaks my heart to see or hear of people who willingly and unthinkingly vaccinate their dogs every year for their lifetimes, never thinking twice about the chronic diseases that may crop up in later life from the practice.

I am especially glad that you made the point that vaccinations are not for dogs who are not in prime health or who are elderly. Why is it that veterinarians don't get this point and insist on foisting potentially dangerous vaccines on a dog whose immune system is already being challenged by health or age issues?

I do have one slight correction. Under your sidebar ("Opposed to All Vaccines?") you state that "every state requires dogs and cats to be vaccinated against rabies." Actually, at least one state leaves that decision up to local municipalities, cities, counties, etc., and does not have state laws requiring rabies vaccination.

Here in Ohio, there is no state law requiring rabies vaccination for dogs. The rabies vaccine is recommended but it is not required by Ohio state law. County or town governments may require rabies vaccinations, based on the recommendations of the local public health officials.

I have an elderly Dane who has seizures following vaccinations, and it took me a long time to find a vet who would admit that the rabies vaccine was not required by Ohio and "let" me not vaccinate my old dog.

Tammy Kinkade, Eyota Danes

Ohio

Thanks for your letter. We were not aware there were any states that do not require current rabies vaccines for all dogs. We've been trying to confirm whether there are any other states with laws that leave it up to local public health officials. We'll let you know what we learn. &



RESOURCES

BOOKS

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

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

TRAINING AND INSTRUCTION

Caryl-Rose Pofcher, My Dog, LLC, Amherst, MA. (413) 256-3833; mydogtraining.net

Emma M. Parsons, The Creative Canine, North Chelmsford, MA. (978) 251-3498; creativk9@aol.com

Penelope Brown, CPDT, Phi Beta K-9 School for Dogs, Washington, DC. swamidogs@earthlink.net; (202) 986-1147

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

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

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

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WHAT'S AHEAD

Shipped Fresh and Raw

The market for commercial raw diets has exploded. Here's what to look for in a diet you can count on for your dog.

Every Dog Walker's Dream

How to get even your sled dog to walk on a loose leash, without yanking, shocking pinching, or shouting.

Savvy Salves

Recipes for making your own safe, effective, healing ointments and salves.

The Care and Feeding of Your Dog's Muscles

The Tour of the Dog series looks at the muscular system.

Preparing for **Success**

Don't bring that puppy home quite yet! Here's how to get your new pup, his new home, and his new family ready for his arrival.

Selecting Supplements

It can be challenging for even knowledgeable consumers to select the best vitamin/mineral supplements for their dogs; we'll help.