



Your complete guide to natural dog care and training

Whole Dog Journal™



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Your complete guide to natural dog care and training

WholeDogJournal™

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Highs and Lows

Life with dogs is never dull, always educational, and sometimes humbling.

Anyone recognize that cute Shepherd-mix on the cover? The dog who is demonstrating solid down-stays for author/trainer Nancy Tucker's informative that appears on the next page?

That's Nova, one of the nine puppies I was fostering for my local shelter last fall, and wrote about for the November 1, 2018 WDJ blog (wholedogjournal.com/blog).

Nova was my favorite of the bunch – very keen to interact with humans, very confident and sassy – and the first to be adopted. She landed in a terrific home, with an active young couple who spend tons of time training, playing, exercising, and educating themselves about dogs. Best of all for me, they live close by, so we often get together to walk our little pack of dogs. After a few months in his role as the patient and always playful “Uncle Woody” to the large litter of Nova and her scrappy siblings, Woody is overjoyed every time he sees Nova and her mom; it means a super-fun hike is in the works!

Nova's placement is also a win for WDJ, since she's a smart, well-behaved dog and her mom's proximity and training acuity means they can model and demonstrate for articles in the magazine, often, I hope! Working with them has definitely been one of the highlights of putting this issue together.

The low-light? I have spent weeks testing these ball-throwing devices, to Woody's delight. He has gotten to play a lot of fetch and is probably as familiar with their various sounds and operations as I am. But I have to watch Woody with tennis balls – the kind that the ball-throwing machines throw the best. Woody, with his great big head and powerful jaws, can pop and chew up a tennis ball the way a big-league baseball player can chew through an entire pack of gum – fast and loud. Also, he cannot be trusted around those miniature tennis balls; a couple of years ago, he grabbed one away from a friend's little dog and swallowed it, quick as a wink. At about 6 p.m. on a Friday night, of course! (Long story short, the emergency veterinarian induced vomiting, and it came up and out as easily – if less enjoyably – than it went down.) Those balls are just *too small* for him to safely be around, so I have been separately holding the three small balls that came with one of the ball-throwing tools away from the rest, taking them out only when I specifically need to test the small balls.

When it came time to photograph all the ball-throwers, I put everything in my car: all the tools and all the balls I had – and I could find only two of the small balls. Ack! I thought I was managing the situation so well! Of course, we could have just *lost* one – but just in case he actually did manage to find and swallow it, I'll be keeping an eagle eye on Woody (his appetite and his poop) for a while (and I threw the other small balls away!).



NK



Oh, Won't You Stay?

Your dog will stay – happily and comfortably – if you teach him the valuable behavior with this dog-friendly technique.

Before I knew anything about dog training, I viewed the “stay” cue as the start of some sort of battle of the wills. I imagined a human would need to have incredible authority over a dog to convince him to stay put for any amount of time.

After I learned about positive reinforcement training, though, I came to understand that teaching a stay behavior doesn't need to have anything to do with power and control, and instead is a matter of reinforcement and trust.

A really solid stay is a beautiful thing to observe. A dog is cued to stay, and despite distractions around him, he won't move from his spot. I am especially impressed when I see a dog looking happy and relaxed while staying put, fully trusting that he'll be released eventually.

The icing on the cake is that this behavior is actually pretty simple to teach, and as a bonus, it can be a really fun process for both the trainer and her dog.

Once your dog has learned to stay on cue, the behavior can come in handy. In the past week alone, I've asked my dog to stay a number of times: When I opened the door for a delivery, when we moved a heavy piece of furniture and didn't want him underfoot, and when I needed to wipe very hot pasta sauce off the kitchen floor (don't ask).

STAY OR GO – IT'S HIS CHOICE

When I'm teaching a dog what I want him to do when I ask him to “stay,” I aim to make sure he knows he has a choice in the matter. He can stay, or he can get up and walk away. Yes, that's right – he can leave if he wants to, right in the middle of a training session. Does this surprise you? Let me explain.

I give my canine students full agency to end a training session whenever they want. They're never obliged to participate. It's my job to keep them engaged and interested in what I'm teaching them.

I also set up the environment to make it far more likely that the dog will offer me the

behavior I'm looking for, and in turn this will provide me with the opportunity to reinforce that behavior. If I've done my job right, the dog I'm teaching won't be interested in getting up to leave. He's allowed to – and I won't stop him if he does – but he won't want to.

Coercion is completely unnecessary when teaching a stay. When we train using rewards to reinforce behaviors, we make it more likely that our dog will choose to do the behavior we reward. In other words, we greatly increase the odds that he'll offer that behavior when given the opportunity.

That's how you end up with a dog who looks relaxed in a stay position, rather than worried, vigilant, restless, or on the verge of standing up and leaving. When I see those worried dogs, I think to myself how simple it would be to turn that situation into one the dog trusts. “You want me to stay here? Sure thing, happy to! Take as long as you need!”

WHAT YOU'LL NEED TO BEGIN

Before we get started, make sure you have the prerequisites in place:

■ **A dog who's had the opportunity to expend some energy.** Don't try to work on this behavior when your dog is bursting at the seams and hasn't yet been for a walk or had

You may or may not have an interest in showing your dog in a formal obedience competition. But you certainly could use the method described here to teach your dog to perform a flawless and relaxed, comfortable showing stay – or just a solid, happy stay that keeps him securely in a safe location for a few minutes.



some play time. On the other hand, avoid wearing him out completely before practicing. You want him to be a little spent, but still have enough energy to use his brain.

■ **Food, and lots of it.** Cut treats into a very small size, like the size of your pinky fingernail for a large dog, and half that size for a smaller dog. You'll be using a lot of food and feeding repetitively. That means avoid working immediately after feeding your dog when his tummy's full, and alternately, avoid working when your dog is really hungry. A hungry dog is far too interested in getting immediate access to the food, and he'll struggle to relax into the exercise.

■ **A mat, towel, or rug.** In the early stages, you'll be using this item as a target on the floor to help your dog identify where he's supposed to be. Avoid using your dog's bed for this exercise. Your dog's bed should be as free as possible from any rules or requests for behavior, in my opinion. That's his sanctuary, his own free space. Grab something else instead.

WORKING IN 3D

We'll split the training exercises into three categories:

- Distance – how far you can move away from your dog.
- Distraction – what kinds of movements you can make and other environmental distractions you can add to the equation.
- Duration – how long your dog can stay put before you release him.

We'll work each of these categories separately at first. Keeping them separate will make it easier for your dog to be successful. We'll start with

The initial cue that Jessie has chosen for Nova's stay is a closed hand held in front of her body.

the easiest level in each category, and we'll gradually make the exercises more difficult as your dog masters each level.

But every time we make things a little harder in one category, we'll make sure to keep the other two categories at a level your dog already knows really well. For example, when we're working on increasing the distance between you and your dog, we'll make sure we keep the other two categories at an easy level. We'll never increase the distance and the duration and the distraction levels simultaneously. That would just be unfair to your dog and would slow your progress.

CHOOSE YOUR CUE

You'll want a verbal cue or a hand gesture, or maybe both. Personally, I use only a hand gesture with my own dog. It looks a little like a "Stop!" hand gesture: hand positioned vertically, palm facing my dog, and fingers together. It doesn't matter what gesture you choose, as long as you and all family members are consistent. For example, if I keep my fingers together, but my husband opens his fingers (like he's flashing the number five), that can be confusing to our dog during the training process.

It's not necessary to place your hand close to your dog's face. In fact, that can be intimidating and uncomfortable for him. I keep my elbow somewhat bent and my hand about 12 inches in front of my body.

The standard verbal cue is "Stay," of course, but you're welcome to use whatever other word you want. If you choose to teach both a verbal cue and a hand gesture, I suggest you begin teaching only the hand gesture at first. It's easier for dogs to learn visual cues before verbal ones.

Once your dog understands the visual cue, you can then add your verbal cue to your training sessions by saying it just prior to showing your hand gesture. After many repetitions of saying "Stay" before showing him the hand gesture, he will have associated the two, and you should be able to drop the hand gesture.

CHOOSE A RELEASE WORD

Before we get started on teaching your dog to stay on cue, you need to choose what word you'll use to let him know he's now free to move around. You can use whatever word you want! In fact, the more unconventional your release word, the less likely your dog will be accidentally released by someone else saying the



Every time you deliver a treat to reward your dog, place it on the ground between her front legs, where she can eat it without having to shift her position. Delivering it on the ground also keeps her from stretching toward it and standing up.

word, or by you saying the word in regular conversation.

For example, I see lots of people use the word “Okay!” to release their dogs. I think it’s a perfectly fine word to use, except that it can sometimes cause some confusion for the dog when that same word is used in casual conversation while he’s been asked to stay.

Imagine asking your dog to stay, and shortly after, a family member tells you, “I’m just running to store, I’ll be right back.” What is your likely response to that? “Okay!” ... and oopsie, you’ve just unintentionally released your dog from his stay.

To release my dog, I say his name followed by “Let’s go!” but that’s just a suggestion. I’ve had clients use funny words like “potato” and “shazam!” Choose whatever release word you like, as long as it’s unlikely to slip out during a casual conversation. It’s also a great habit to say your dog’s name before giving him your release word. It lets him know that you’re addressing him, that the next thing that comes out of your mouth is something he should pay attention to, and helps eliminate confusion.

READY, SET, STAY!

The first exercise is incredibly easy:

- 1** Choose a quiet spot in your home that will allow you to walk a few steps away from your dog and where there are few to no distractions. Grab about 15 small treats.
- 2** Ask your dog to lie down on a mat, and stand facing him.
- 3** Show him your hand gesture for “stay” and immediately lean down and place a treat on the floor between your dog’s outstretched front legs, then stand straight again.



- 4** Repeat this until you’ve gone through all 15 treats.

That’s it. You’re done. It doesn’t seem like much, but you have already begun teaching your dog that lying on a mat and not moving is really kind of fun!

GETTING DISTANCE

The next exercise is set up the same way, except now you’ll start moving away from your dog, one step at a time. The lesson you’re teaching your dog is “even though I’m moving, the best thing for you to do now is to stay where you are.”

Once you have your treats in hand, and your dog is lying on his mat, facing you, you will:

- 1** Show your dog the stay cue and then take a single step backward.
- 2** Return to your dog, lean down, and place a treat on the floor between your dog’s outstretched front legs. Why on the floor? Because if you deliver the treat to his mouth, you’ll soon notice he will start to stretch his neck and body upward and toward your hand to get the treat. Soon, he’ll be standing!
- 3** Repeat this single-step exercise five times. You will have gone through five treats.

- 4** Now show him the hand gesture and then take two steps back.

- 5** Return to your dog. Lean down and deliver the treat.

- 6** Repeat this two-step exercise five times. You will have gone through five more treats.

- 7** Now take three steps backward, return to your dog, and deliver the treat. When you’ve done this five times, you should be out of treats.

THE END OF THE STAY

It’s time to release your dog from his stay.

- 1** Stand still and resist the urge to make a gesture with your hands or body. We want the release word to become significant and to not be overshadowed by any movement you might make.
- 2** Say your dog’s name, followed by a brief pause (so he doesn’t learn to start to rise when he hears his name), then say your release word. For example, “Fido (brief pause), let’s go!”
- 3** Then, after you’ve finished saying your release word, you can invite your dog to move off of his mat by clapping your hands and moving backward quickly, or clapping your

thighs and using a high-pitched playful voice (for example).

4 Praise your dog and play with him for a moment away from his mat. He's done really well!

5 Soon after your short break, grab some more treats, invite your dog back on the mat, and begin again. This time, try to make it to four steps backward for a few repetitions. If your dog finds this harder and stands up, refer to the trouble-shooting tips below and on the next two pages.

6 If he's doing well with four steps, resist the urge to go to five steps just yet! Instead, start varying the number of steps you take, always returning to deliver a treat on the floor. Try taking three steps (return and

treat), then one step (return and treat), then four steps (return and treat), then two steps (return and treat).

7 When you're out of treats, stand still and say your release cue, then invite your dog to step off his mat and play with you. That's enough for now. Call it a day!

DISTANCE-PRACTICE TIPS

As you gradually increase the number of steps you take away from your dog, you can begin adding these new elements of difficulty.

■ **Turn your back.** So far, you've been taking steps while moving backward, always facing your dog. Later, when your dog is acing the easier exercises, try turning your back to walk away from your dog instead of stepping



Work on increasing the distance between you and your dog during the stay at first. Once your dog's stay is solid with a bit of distance, reduce the distance and begin to practice stays of greater duration.

backward. Keep it easy at first! If you can take eight steps away from your dog while facing him, try showing him the hand gesture, turning your back, and taking only three steps away before turning back around and returning to him to deliver the treat.

■ **Walk around a large object.** Once you're able to move away from your dog with your back turned to him, try walking around an object that only partially obstructs his view of you before returning to deliver a treat to him. For example, walk around the dining room table (he can still see your legs), or around the island in the kitchen (he can still see the top half of your body).

■ **Disappear from his view entirely.** This one can take some time to work up to. Don't rush it! When your dog successfully stays on his mat while you walk around an object, try slipping out of his view for just a nano-second. Maybe you can walk away from him in a straight line down a hallway, and after a few steps, slip into a bedroom doorway or behind a corner, and then very quickly reappear. Return to him to deliver a treat between his paws.

D2: DURATION

To add duration to the stay behavior, you can begin to pause before returning to your dog to deliver the treat.

Distance Trouble-Shooting Tips

- When you're stepping away from your dog, move quickly. If you move too slowly, your dog might get up and follow you. You want to move at a pace that will assure him that you're returning immediately to deliver that treat.
- Don't pause between stepping back and returning to your dog. Stay in constant motion. Once you reach the maximum number of steps you want to take during a repetition, immediately return in one fluid motion. Your movement should look like that of a ball being tossed in the air; there is no hesitation before returning.
- Be mindful you're not tossing the treat or letting it drop on the floor from too high up. This might cause it to roll or bounce away from your dog, and he'll stand to get it. If that does happen, though, let him have it, and invite him back into position on his mat before resuming the practice. It was your mistake, not his.
- If your dog stands up when you bend down to deliver a treat, it's possible that he's not comfortable with having someone lean over him. Try bending your knees and squatting to avoid leaning over him, or stand a step farther away from him.
- If your dog successfully stays on his mat while you take two steps backward, but he gets up and follows you when you try three steps, return to an easier level of the exercise and do a few more repetitions before trying three steps again.
- If you have a dog who is used to always training with the use of a clicker and you feel he would do better if you used one for these exercises, you can click to mark the moment just before you begin returning to him. In other words, you would click at your farthest point. But in general, a marker is not necessary when training the stay behavior.

Start with a very short pause at first. Take an easy number of steps away from your dog, pause for two seconds, and return to your dog to deliver a treat. Gradually increase the number of seconds you pause. *Don't move ahead too quickly with this part!* Resist jumping from a two-second pause to a 10-second pause, and just as you did with the number of steps in the earlier exercises, vary the length of your pauses.

For example, once you're able to consistently pause for five seconds before returning to your dog, and your dog is looking nice and relaxed, try varying your next repetitions between five seconds, then three seconds, then one second, then increase to six seconds, then back to two seconds. Keep it variable as you slowly increase the number of seconds.

Don't forget to practice your dog's release cue every now and then! Once he's off the mat, praise him playfully. Then invite him back to his mat for more training and treats.

You might notice that it takes a little more effort to convince him to get up when you release him. That's great! It means he's enjoying the stay exercise. It's *fine* if he chooses to stay on the mat. A release cue simply means "You can move, now" – not "You *have* to move now!"

Duration Trouble-shooting Tips

- If your dog appears to become less tolerant of the longer pauses, he might be anticipating that the next pause will always be longer than the last one. That can become frustrating and demotivating. You don't always need to keep making the exercise more difficult in a linear fashion. Once in a while, throw in an easy repetition or two to keep your dog interested in the game.
- Avoid staring at your dog while you pause. He'll think you're expecting him to do something, and you might notice him start to offer you behaviors that he knows. Keep facing your dog, but "act casual." I sometimes look around the room calmly, blinking softly. Or I'll inspect my fingernails.

D3: DISTRACTION

Distractions need to be introduced gradually into your training. So far, you've been working in a quiet environment and all of your movements have been pretty consistent. You have been moving away from your dog and returning to him to give him a treat.

Now you can start to change the game up a bit. Instead of moving in a straight line away from him, you can start moving in a circle around him. But wait! You'll need to proceed with this exercise the same way you did with the distance exercises: One step at a time.

Once you have your treats in hand, and your dog is lying on his mat, facing you, you will:

- 1 Show him your hand gesture, and then take a single step a little to the right. Imagine you are beginning to walk a circle around your dog, counter-clockwise.
- 2 Return to face your dog after that one single step. Lean down and place a treat on the floor between his outstretched front legs.
- 3 Repeat this single-step-to-the-right exercise five times, showing your hand gesture before each repetition.
- 4 Now take two steps counter-clockwise.
- 5 Return to your dog. Lean down and deliver the treat.
- 6 Repeat this two-step exercise five times.
- 7 Now take three steps counter-clockwise, return to your dog, and deliver the treat.
- 8 Once you have successfully done a few repetitions at the halfway mark – i.e., you've reached your dog's tail end – you can then try walking all the way around the dog.

At this point, start to mix it up. Walk around objects, keep your gaze on something other than your dog, turn your back to your dog, and/or briefly step out of his view altogether – so he doesn't associate the stay cue with only you in front of him and making eye contact.



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When you've successfully done a handful of repetitions in one direction, it's time to start doing the same exercise, but in the clockwise direction. Again, start with one step at a time. This might feel repetitive, but this type of gradual progress is the best way to get that nice, relaxed response from your dog when you ask him to stay.

MORE DISTRACTION PRACTICE EXERCISES

■ **Add silly movements.** So far, you've kept your body movements relatively quiet. Now, begin adding more movements that can serve as a distraction that your dog learns to ignore. For example, after walking a short distance away from your dog, briefly wave your arms around before returning to him immediately to reward him. Or perform a few dance steps, get silly with it! If your dog gets up, tone it down a bit until he understands that he's still expected to hold the stay. Then you can turn up the silliness quotient again.

■ **Add a low-value toy.** Grab a low-value toy or object and hold it behind your back, out of your dog's view. Stand back a few steps from him, show him your stay gesture, then extend your other arm to the side to show him the object. Quickly hide it behind you again and then deliver a treat to him. Repeat this several

times. When your dog does well, you can begin shaking the toy a bit, or even squeaking it just once or twice. Remember to reward your dog after every single successful repetition.

■ **Add a high-value toy.** Repeat the previous exercise, but with a toy you know your dog really wants.

In the end, teaching a stay behavior is all about rewarding your dog heavily for staying in one place. It's also about releasing him often during practice so that he learns to trust that he'll be allowed to move soon enough, which should help him to relax while he waits. 🐾

Nancy Tucker, CPDT-KA, is a full-time trainer, behavior consultant, and seminar presenter in Quebec, Canada. See page 24 for contact information.



Thanks to Jessie Bracey and Nova for demonstrating these exercises.

Distraction Trouble-Shooting Tips

- If your dog stands when you're walking a full circle around him, step around him more quickly. He might turn and shift his weight to watch you walk. That's okay. If you're quick, he won't have time to stand up. Once you've gone around a couple of times, he'll understand what to expect and he'll relax into the exercise.
- Be mindful of his tail! Sometimes dogs will be quick to stand if we come too close to his tail. I can't blame them! If you notice this, give his tail end a wider berth. That should help reassure him.
- If your dog struggles to stay put, look around for things in the environment that might be making it hard for him. Are there distractions like food or toys on the floor, or another dog close by? Are you working next to a busy area of the house, or maybe next to a door? Is there an appliance nearby that keeps turning on and off noisily?



PRODUCT
REVIEW

Throw It For Me!

Tools that can throw a ball for your dog, with no shoulder motion or pitching ability needed.

Raise your hand if a bum shoulder keeps you from throwing a ball (or throwing a ball very far) for your dog. Actually, maybe just nod instead; if you're like me, even raising your hand can hurt your shoulder on some days!

If you nodded, you – and especially your fetch-crazy dog – are in luck! There are a number of toys and tools that can throw your dog's ball for you with absolutely no shoulder action required.

PRODUCTS WE TESTED

We purchased the three most popular ball-throwing machines that will shoot out tennis balls, and have been flinging balls all over town to compare the features of these expensive machines. Your dog can play fetch all by himself with each of these products – that is, after you set one up, turn it on, and have taught him to drop his ball into the hopper that each product has positioned on the top. We tested three big-ticket ball throwing machines:

- GoDogGo Fetch Machine
- iFetch Too
- PetSafe Automatic Ball Launcher

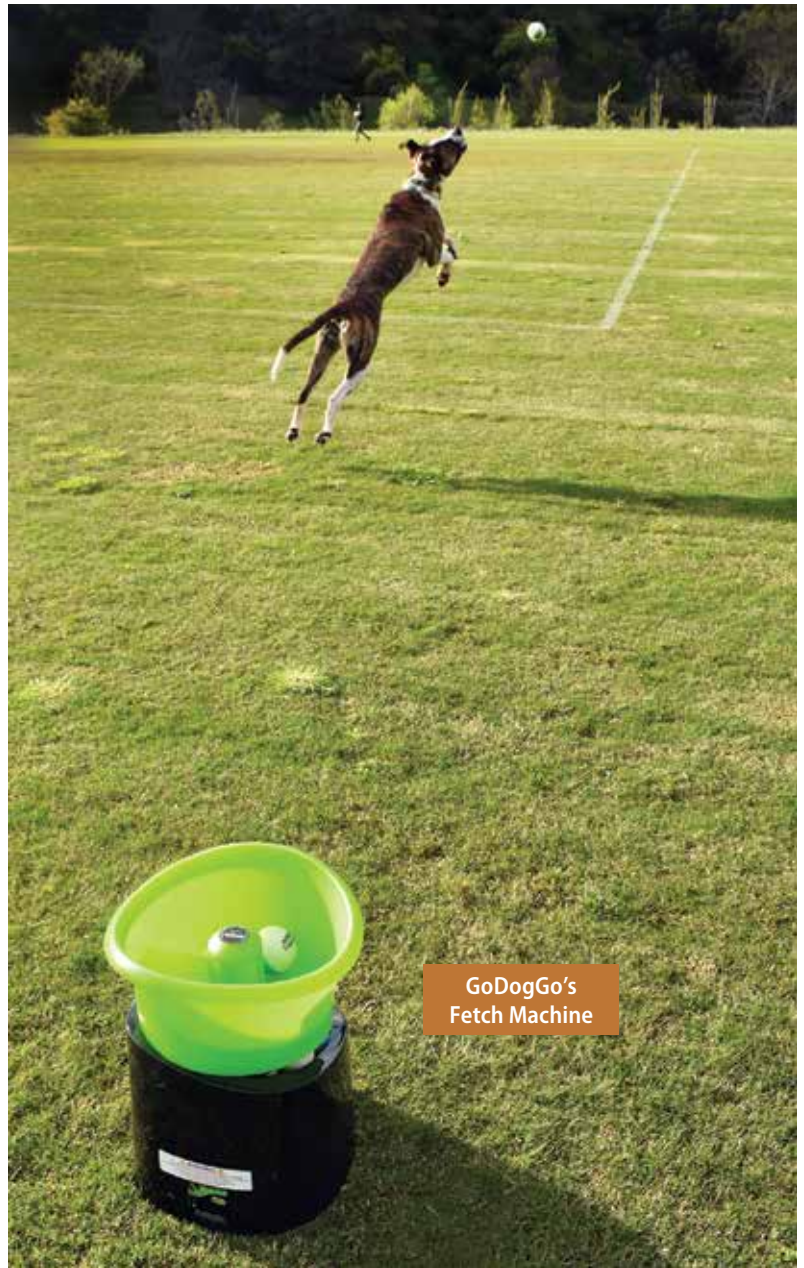
While it's not a straight-up comparison, we also purchased a couple of low-cost, low-tech launchers that don't use batteries or electricity, but also don't depend upon the shoulder movement that a Chuck-It or other ball-flinging tool requires. These toys (or tools? not sure which to call them!) are styled like guns or water blasters and shoot out a tennis ball or mini-tennis ball for your dog with the pull of a trigger:

- Nerf Tennis Ball Blaster
- Hyper Pet K9 Kannon

Each of the products had unique and useful features not shared by the others, so while we definitely developed our own preferences

among the toys, you may have different needs and preferences that would make *other* products rise to the top of your list of favorites. If we were buying just one, however, knowing about the differences ahead of time would have definitely guided our purchase to one of the machines and one of the “blasters” over the others. We will describe each of the products so you can make your own choice!

GoDogGo's Fetch Machine was our top pick of ball-launching machines, for its ability to throw a multitude of balls at each “reload,” the clues it gives so the dog is ready for the launch, and the ability to vary the time between throws.



OUR TOP PICK: GODOGGO'S FETCH MACHINE

The owners of GoDogGo say they invented the very first automatic ball-launching machine in 1999. They have produced and improved the patented **GoDogGo Fetch Machine** (which appears in the photo on the previous page) ever since.

Two models are available. The G4 Fetch Machine can launch as many as 17 standard-size tennis balls (it can actually *hold* more, but the company recommends loading it with a maximum of 17, as more balls may cause the chute to jam). It can throw standard-sized tennis balls and mini tennis balls. The Fetch Machine Jr. accommodates only small balls, 1.5 inches to 2.25 inches in diameter. Both machines can be used while plugged into an AC outlet, or powered with six D batteries.

We didn't test the Jr., but, to the delight of our dogs, the G4 launched balls farther than *any* of the products we tried.

The machines can be set to launch with a variably timed delay, *or* to launch when you press a button on a remote control (included with the machine). Neither of the other machines we reviewed have varying launch delays *or* a remote-controlled launch. Also, this machine is the only one that allows you to load up the bucket/hopper with a *bunch* of balls.

Whether you use the timed delay or the remote control to launch a ball, the machine takes a few seconds to *prepare* the launch, and makes a gears-moving noise that helps the dog (and operator!) know exactly when the ball is going to get thrown out. Our test dogs quickly figured it out and started to run as soon as they heard the noise that indicated a launch was imminent.

Playing with a full hopper of balls is a little chaotic but fun, especially if you have multiple dogs running around and you are just encouraging playful exercise. If you want to maintain a nice, clean retrieve, though, you really want to play with just one ball, because even with the longest interval between the timed

launches, there are moments when the dog is still bringing back one ball when another is launched. Every time this happened, our test dogs always dropped the ball they were retrieving and went for the most recently launched one – not a big deal for us, but you may not like that.

If you teach your dog to drop a ball into the hopper, he can play fetch by himself. Set the delay time (4, 7, or 15 seconds); then the machine will launch the ball approximately that many seconds after the ball is dropped into the hopper.

■ Safety features

GoDogGo's literature mentions a "safety sensor" – but this is quite different from the feature of the exact same name in PetSafe's Automatic Ball Launcher.

In the Fetch Machine, the "safety sensor" turns on the motor when a ball is in the chute and ready to be launched; it's a little lever that gets pressed down when a ball rolls into place on top of it. When no ball is in the chute, the motor turns off.

We're concerned that this arrangement might pose a potential safety hazard, although it's a long shot. If, when the machine was turned on, a dog stuck his nose or paw in the empty chute, *constantly* pressing down on this lever for several *long* seconds, the motor will engage and the ball-launching mechanism could, conceivably, thwack him on the paw or nose. However, if he only pawed at it, or nosed it for a second or two, the motor would halt each time he lost contact with the lever. This would be much more likely to pose a risk to a curious and unsupervised small child than a dog, so take note: This isn't for little kids!

The product literature instructs users to encourage their dogs to stand at least five feet from the machine. Balls launch out of the machine at quite an upward angle, however, so the biggest risk of being hit hard by a ball is to tall dogs or humans standing immediately in front of the machine. A small dog who ran in front of the machine

several times as it launched was never hit, thanks to that nice upward launch angle. Whew!

GoDogGo sells balls of various sizes, weights, and textures for use with its machines (lightweight balls for indoors, smooth balls for extra bounce). The company warns that its machines should not be used in wet weather, nor should they be used in extremely hot or cold temperatures, for the dog's health and safety.

RUNNER UP

The **iFetch Too**, introduced in 2016, was a much-anticipated follow-up to the original iFetch, which was introduced in 2013, but which launches only small-sized balls. In contrast, the iFetch Too throws small *and* standard tennis ball-sized balls. Yay for us big-dog people!

After spending days with the GoDogGo and the PetSafe ball launchers, both of which take a few moments and make noises as they prepare to launch a ball, the quick and quiet launching action of the iFetch actually startled us! When you or your dog drops a ball into the hopper, it almost instantaneously flings the ball out.

The iFetch Too has three distance settings – 10, 25, and 40 feet – and can be set to any of these, or set to cycle through these distances randomly.

It's also the only one of the three machines we tested that has an internal rechargeable battery. Its maker says the iFetch Too will launch a ball about 250 times on a full charge (or, of course, infinitely when plugged in).

The ball-launching mechanism



iFetch Too

of the iFetch seems like it would pose less of a danger to a curious dog nose or paw than that of the other products. The mechanism – comprised of a spinning plastic wheel on either side of the launch chute – moves *only* when a ball drops into the loading chute on the top, and only for as long as it takes for the ball to launch. The only way for a curious nose or paw to come into contact with a moving part would be if *another* dog was putting his nose or paw into the *other* opening at the exact same time – rather unlikely!

That said, an unwary dog or person who steps in front of the unit when a ball is dropped into the hopper could certainly get immediately smacked by the ball.

If it seems like we have way less to say about this product than the last one, it's because, especially in contrast to the feature-laden GoDogGo Fetch Machine, the iFetch is an elegantly simple machine.

NOT A FAVORITE

There are two adjustment knobs on **PetSafe's Automatic Ball Launcher**. One changes the distance of the ball's launch, supposedly with nine possible settings, from about 8 feet to about 25 feet. One changes the angle of the launch, supposedly with six possible angle settings; these also affect the total distance that the launched ball will travel.

In our tests, only changes from one end of the angle settings to the other extreme were easy to observe; angle changes from adjusting the in-between settings were too subtle to appreciate. Likewise, small changes in the distance settings did not usually result in appreciable differences in the distance that the ball was launched, though a difference from one extreme to the other in the settings again was noticeable.

On the setting for the shorter distances, as many as three tennis balls can be placed into the hopper at once. However, according to the manual, on the higher distance settings, it's best to put only one ball in the hopper at a time, as the balls in waiting



PetSafe's Automatic Ball Launcher

may be knocked out of the machine by the launch of the first ball.

The Automatic Ball Launcher has several safety features. There is a motion sensor that is meant to prevent a launch when a dog or person is moving within 7 feet directly in front of the machine. However, we noticed that if a dog runs up to the machine and then stands still – as many fetch-addicted dogs are wont to do when waiting for a ball to be thrown – the machine will go ahead and launch.

There is also a safety sensor in the “launch pocket” (the chute that the ball is launched from); it detects if a dog has thrust his nose or paw into the chute in an effort to grab the ball before it is launched and it prevents the launch. Nice!

Another built-in safety feature is a programmed “rest mode,” which is intended to protect a dog from fetching to the point of exhaustion or overheating. The launcher will throw balls for only 15 minutes at a time, and then go into rest mode for 15 minutes before starting again. This can be overridden by a human operator (presumably only with good judgment as to the weather, the dog's fitness, etc.), but (obviously) not by a dog who is left alone with the toy.

The launcher should not be used in wet conditions or on wet grass. For the dog's safety, PetSafe also cautions against use in extreme hot or cold.

While the Automatic Ball Launcher has the most safety features, it was the

noisiest of the three machines, and launched balls the shortest distance. Lacking either the remote-controlled launch or loading capacity of the Fetch Machine, and without the rechargeable battery and quick, quiet launch of the iFetch, it's just not as compelling as either competitor.

LOW-TECH LAUNCHERS

Maybe you don't need an expensive machine to throw balls for your dog. Perhaps your dog isn't *such* a fetch fanatic; you're just looking for an easier way to launch a *few* balls.

Our recommendation in this case would be **Nerf's Tennis Ball Blaster**. While grasping the trigger/handle of the shotgun-like Blaster, you can lower the opening of the “barrel” over a tennis ball that's on the ground; this gesture scoops up or rather inserts the ball into the barrel (so you don't have to pick up a spit-covered ball – but you *can* also just insert the ball into the end of the barrel with your hand). Then, slide the cocking mechanism on the top of the toy forward and back; the Blaster is then “loaded” and ready to launch when you pull the trigger.

The full-sized Blaster (sometimes described as the “20-inch Blaster”) can shoot either standard-sized tennis balls or the small ones; just be warned that the big Blaster won't pick up small balls off the ground (this is important only if you have trouble bending over and picking up balls from the ground).

The small-sized Blaster (called the “**Tennis Ball Blaster with 3 Reload**” on many online sites) comes with three small balls, but costs more



Nerf's Tennis Ball Blaster

than the large one. It picks up and launches only the small-sized balls – great for small dogs, but not safe for medium-sized or larger dogs (due to the risk of choking on or swallowing the small balls).

NOT RECOMMENDED

One product we wouldn't bother with is **Hyper Pet's K-9 Kannon**. It, too, can be used to pick up standard-sized tennis balls off the ground, and will launch balls of either standard or small size.

But, in our opinion, the design is inherently unsafe and difficult to prepare to launch. To ready the Kannon, you draw back on the handle at the rear of the toy, stretching a thick rubber band (which powers the launch) out of the back of the



Hyper Pet's K9 Kannon

Kannon. This requires a fair bit of strength! And if you are unable to draw it backward to its maximum distance, it won't launch the ball far.

Worse, when you pull the trigger, the rubber band snaps back into the Kannon, launching the ball and – if you don't hold the launcher *just so* – pinching you or whacking you with the handle as it launches the ball. This stretching/releasing of the rubber band outside of the body of the Kannon is just too hazardous to the handler for us to recommend this product. 🐾

WDJ's Product Ratings

The product has no redeeming value that we can appreciate.

🐾 *We are including the product only because of its potential for improvement.*

🐾🐾 *The product has some value, as well as some serious flaws. Some of its features may be useful in certain applications.*

🐾🐾 *A good product, with one or two significant flaws.*

🐾🐾 *As good as it gets. We strongly endorse the product.*

TOY BALL LAUNCHERS, COMPARED

WDJ Rating	Product Name Maker, Contact Info	Price, Warranty	Launcher Powered By	Comments
🐾🐾 🐾	GODOGGO G4 FETCH MACHINE GoDogGo, Inc. (253) 228-4751 godoggoinc.com	\$180 for G4 Fetch Machine (\$150 for Fetch Machine Jr). 30-day guarantee; 6-month warranty	AC power supply (included) or six D batteries	Launcher has three distance settings: low, medium, and high. On "high," it threw the balls farther than any of the other products we tested. The Fetch Machine (both sizes) can be set to throw balls at three different time increments (4, 7, or 15 seconds apart); alternatively, a remote can be used to initiate launch. The G4 can be used with up to 17 balls of various sizes, weights, and textures; the Fetch Machine Jr uses only small balls. (Use small balls only with small dogs; small balls pose a choking or swallowing hazard to larger dogs – ask WDJ's Woody about this sometime.)
🐾🐾 🐾	IFETCH TOO iFetch, LLC (512) 219-3271-4379 goifetch.com	\$200 (\$115 for small iFetch) 30-day guarantee; one-year warranty	AC power supply (included) or internal rechargeable battery	The iFetch has three distance settings (from about 10 to 40 feet). The initial angle of the launch increases with the distance for which it is set. Immediately launches a ball that is dropped into the hopper. This is the quickest, quietest machine we tested. It's also the only one with a rechargeable internal battery. Company says a fully charged battery will launch a ball about 250 times.
🐾🐾	PETSAFE AUTOMATIC BALL LAUNCHER PetSafe, a div. of Radio Systems Corp. (866) 738-4379 store.petsafe.net	\$160 45-day guarantee; one-year warranty	AC power supply (included) or six D batteries	PetSafe says the launcher has nine distance settings and six angle settings, and will throw standard-sized tennis balls between 8-30 feet and up to a 45-degree angle. We saw little difference in the distance thrown from one end of the distance settings to the other, though the angle settings did change the angle of the ball's path. Safety sensor stops play when dog (or person) is directly in front of launcher.
🐾🐾 🐾	NERF TENNIS BALL BLASTER BLASTER WITH 3 RELOAD Nerf, a div. of Hasbro Available online and in pet supply stores; we bought them at Petco	\$20 (large) \$26 - \$29 (small, sold with 3 small balls)	Mechanically powered by an internal spring	An internal spring "fires" the Blaster, and launches the ball when the trigger is pulled. To reload, place the ball in the front of the Blaster; then slide a lever on top of the toy forward and then back. The large Blaster shoots regular and small-sized tennis balls about 30 feet. The smaller one ("With 3 Reload") shoots only small balls, and not as far.
🐾	HYPER PET K-9 KANNON Hyper Pet, LLC Available online and in pet supply stores; we bought it at Bed, Bath and Beyond	\$20	Mechanically powered by a large rubber band	It takes a good bit of strength to draw back the K9 Kannon's handle to stretch its rubber band to the desired tension; pulling it back all the way launches the ball the farthest (only about 20 feet). But we found that you have to hold the Kannon carefully so you don't get smacked or pinched by the rubber band when the trigger releases it.



Addison's Disease: The (Not So) Great Pretender

This symptoms of this disease can make it difficult to pin down.

Addison's disease is often called the "great pretender." The symptoms can be chronic, vague, and masquerade as other illnesses. The initial diagnosis is often missed and only discovered after other diagnostic avenues have been exhausted. In any dog that has waxing and waning signs like decreased appetite, weight loss, diarrhea, vomiting, or just general "poor doing," Addison's should be on the differential diagnosis list. This is especially true in breeds such as Rottweilers, Great Pyrenees, and Portuguese Water Dogs.

THE ENDOCRINE SYSTEM

The medically descriptive name for Addison's disease is hypoadrenocorticism, referring to inadequate adrenal gland secretion.

The adrenal glands are part of the very complex endocrine system, which is a chemical messenger system that helps regulate and modulate the function of the dog's organs.

The endocrine system begins in the brain, at the hypothalamic axis. The brain releases chemical signals, which, in turn, start a cascade of other actions. The brain secretes corticotropin-releasing hormone (CRH), which stimulates the pituitary gland to secrete adrenocorticotropin hormone (ACTH), which normally stimulates the adrenal glands to make and release cortisol hormones into the blood.

The small, peanut-shaped adrenal glands are positioned just above the kidneys. They are divided into two areas: the cortex (outside) and the medulla (inside). Each part releases different substances when cued to do so by the ACTH.

The adrenal medulla produces catecholamines, including adrenaline, norepinephrine, and small amounts of dopamine. These hormones are responsible for all the physiological characteristics of the so-called "fight or flight" response.

The adrenal cortex produces a variety of steroidal hormones, including mineralocorti-



There is quite a long list of dogs who are at a higher-than-average risk of developing Addison's disease, including Rottweilers, but the condition can afflict a dog of any breed.

coids (which help maintain electrolyte balance and blood pressure) and glucocorticoids (including cortisol, which helps regulate body metabolism). Without these hormones, all sorts of body functions will go awry.

HOW ADDISON'S DEVELOPS

Addison's disease occurs when the adrenal glands or brain axis are not functioning properly. It can be divided into two categories: primary and secondary.

In primary Addison's disease, the problem is the adrenal glands themselves. In the case of 75 to 95 percent of Addisonian dogs, the problem begins when the immune system damages the adrenal glands so that they can no longer release their important hormones. In a small subset, only the glucocorticoids are affected. This is called atypical Addison's.

Secondary hypoadrenocorticism occurs at the level of the brain. Trauma, infection, inflammation, and cancer can all cause abnormalities in the axis. These cases are not common. A much more likely cause of secondary Addison's disease is when a dog has been

given steroids long-term for problems like allergies or autoimmune disease, and the steroids are suddenly withdrawn.

When a dog is given supplemental steroids, the body downregulates its own production of these steroids. When the supplemental steroids are stopped suddenly, the body does not have time to adjust and produce more. This causes a crisis, but it is not permanent. This reaction is why long-term steroids must always be weaned slowly.

SYMPTOMS AND DIAGNOSIS

The symptoms of Addison's disease can be insidious and chronic. A dog will have episodes of gastrointestinal upset with or without weight loss. Sometimes weight loss is the only sign, or there are very few symptoms other than occasional listlessness. It is easy for these to go unnoticed.

These vague symptoms are why many dogs are diagnosed only when they experience an Addisonian crisis. In this case, the lack of steroids and/or mineralocorticoids causes an acute, life-threatening collapse with severe electrolyte imbalances, dehydration, and gastrointestinal disease. A dog may seem normal then suddenly start vomiting, experiencing bloody diarrhea, and collapse. This is an emergency. The signs are not specific to Addison's disease and can represent other conditions such as

anaphylaxis or acute hemorrhagic gastroenteritis; these conditions, too, call for emergency medical care.

The diagnosis of an Addisonian crisis is made based on clinical signs, history, signalment (age, breed, and sex), a physical exam, and bloodwork. Typical Addison's disease causes highly characteristic changes found on the dog's blood tests. Electrolyte changes are present including very elevated blood potassium in conjunction with a low sodium level. A sodium:potassium ratio should be evaluated by your veterinarian. A ratio of less than 27:1 often indicates Addison's.

Other changes can include low blood sugar (hypoglycemia), mildly elevated kidney values, and a normal white blood cell count in the face of illness. In an ill or stressed dog, the white blood cell count should be elevated, indicating a bodily response. However, in Addisonian patients, this doesn't occur. It's important to know that these changes are in typical hypoadrenocorticism, in which both cortisol and mineralocorticoid levels are low.

In atypical Addison's, only cortisol is involved. Bloodwork may be mostly normal. Electrolytes will not be affected. Sometimes the only change is a low blood sugar and a lack of elevation in white blood cells. This makes recognition and diagnosis a challenge.

The definitive test for both typical and atypical is the ACTH

stimulation test. In a patient with Addison's disease, the glands cannot secrete cortisol and mineralocorticoid because they are not functioning or are atrophied.

The patient must stay at the veterinary clinic for several hours while the test is administered. An initial baseline cortisol level is drawn. This is typically very low in Addisonian patients. The dog is then given an injection of substance that mimics ACTH in an effort to stimulate the adrenal glands; the cortisol levels are checked two hours later.

In a patient with hypoadrenocorticism, the adrenal glands do not respond and the "post-cortisol" level is close to zero, confirming the diagnosis. Note that the blood samples for this test must be sent to an outside laboratory; this is not an in-house test.

TREATMENT

Initial treatment will depend on whether a dog is typical or atypical and on the severity of the condition at presentation.

If a dog is diagnosed while stable, initial treatment is with oral steroids, usually prednisone. This is true for both typical (deficiencies in cortisol and mineralocorticoids) and atypical (deficiency of just steroids). Due to the many side effects they can cause, therapeutic steroid dosages should be adjusted over time to the lowest possible dose.

If a dog is atypical, steroids are usually sufficient treatment. It is important to note that some dogs who initially present with atypical Addison's will progress to the more typical disease, eventually requiring the mineralocorticoid supplementation, as well.

There are currently two options for this: an oral supplement (fludrocortisone acetate) and an injectable one (desoxycorticosterone pivalate, better known as DOCP).

Fludrocortisone acetate, the less expensive choice, is given daily. It has both mineralocorticoid activity and some steroid activity, so certain patients can be maintained on fludro-

A Note About Whipworms

The canine whipworm, *Trichuris vulpis*, is a nasty parasite that lives in the large intestine. The symptoms of a whipworm infection can be very similar to Addison's disease and include weight loss, vomiting, and bloody diarrhea. Further, they can cause the characteristic bloodwork changes of Addison's, particularly the telltale sodium:potassium ratio.

If you are in an endemic area (ask your veterinarian, or see the informative prevalence maps at capcvet.org/maps), keep your dog on a monthly prevention that protects against whipworms. Sentinel, Trifexis, Interceptor Plus, and Advantage Multi all contain ingredients that treat whipworm infections. Check the label or product insert on your dog's flea/tick and heartworm preventatives to see if they contain an agent that specifically targets whipworms.

cortisone only. However, monitoring is more intense for the first 18 to 24 months, and in some cases, it just doesn't work well enough. The side effects of the glucocorticoid portion can also be very intense at higher doses (increased drinking, increased urination, panting, weight gain, and restlessness).

The better alternative is DOCP, given as an injection every 25 to 30 days. This is by far the preferred treatment option because of the long duration between injections and how well it works. With veterinary instruction, it can be administered at home. However, DOCP can be very expensive for big dogs. Also, it is intermittently unavailable, so in those cases, fludrocortisone acetate may be chosen as the initial treatment.

The treatment is different for a dog who is diagnosed due to an Addisonian crisis – unfortunately, this is not uncommon. A previously healthy dog may suddenly develop copious vomiting, hemorrhagic diarrhea, shock, and collapse. This is an emergency and requires immediate veterinary attention. Dogs are usually suffering low blood pressure, low blood sugar,

and seriously unbalanced electrolyte levels.

Large volumes of intravenous fluids will correct low blood pressure and electrolyte abnormalities. A physiologic dose of a short-acting steroid (Dexamethasone-SP) is given. This will not interfere with necessary testing to confirm the diagnosis (while other, longer acting steroids will). Blood sugar is often low during a crisis and should be treated as well. Dextrose will be added to the fluids.

Patients will be in the hospital anywhere from two to five days, depending on the severity of shock and electrolyte imbalances. Serial bloodwork is performed to monitor sodium and potassium, as well as blood glucose. Electrolytes may be checked as frequently as every four hours in the initial 24- to 48-hour period. Blood pressure is monitored closely. Treating an Addisonian crisis can be costly and stressful, and the prognosis is always guarded.

MONITORING

Once stable, dogs with hypoadrenocorticism must be monitored closely at home. Symptoms of impending



crisis can be as subtle as shaking but also may include vomiting, loose stool, decreased appetite, and weakness. Any time a stressful event occurs and the body naturally requires more cortisol, a dog is at risk for a crisis. Ask your veterinarian for information about increasing steroids in these times.

Serial bloodwork is needed to titrate treatment. This usually includes electrolyte monitoring, as well as periodically checking a full blood panel. Electrolytes are usually checked every three to six months initially; once they have normalized, the tests can be less frequent.

A full metabolic panel is recommended every six months. When a patient is maintaining well on DOCP, the dose is usually sufficient to manage symptoms for the rest of the animal's life.

PROGNOSIS

Treatment is lifelong, but the prognosis for Addison's disease is positive overall. The limiting factor for many dog owners is the cost of repeated laboratory testing in the first 12 to 18 months. DOCP also can be expensive for large dogs. Once the disease is stabilized, however, dogs often enjoy a good quality of life with minimal follow-up testing and less expense. 🐾

After nine years in emergency medicine, Catherine Ashe, DVM, now works as a relief veterinarian in Asheville, NC.

A Pitch for Pet Insurance

Pet insurance is always a good idea, but even more so if your dog is diagnosed with a chronic illness such as Addison's disease. Since it is such an excellent mimic, it make take several lab tests before the correct diagnosis is made. Even if the diagnosis is made quickly, follow-up testing, medications, and monitoring can quickly add up (no pun intended).

Most pet insurances decline coverage for pre-existing conditions. With a diagnosis of Addison's disease, it is likely too late to find a company that will pay for diagnostics and treatment. If your dog was insured beforehand, however, insurance can be a literal lifesaver.

As a veterinarian, I wish more owners would consider pet insurance. Making a diagnosis under even the best of circumstances with unlimited funds can be challenging. It is even more so when finances are a major factor. Of all the chronic diseases, Addison's is one of the most easily treated and managed. Unfortunately, the cost of diagnosing, treating, and monitoring can be a burden, and sometimes hard decisions must be made. "Financial euthanasia" can be especially traumatic for everyone involved.

Dogs with Addison's disease can be tricky to diagnose, time-consuming, and test-intensive in the initial stages. Pet insurance can alleviate this strain dramatically. In this situation, we all win: the veterinarian, the pet owner, but mostly importantly, the patient!

For tips on buying pet insurance, see "Rest Insured," WDJ March 2018.



BEHAVIOR

Aggression Unpacked

Understanding why a dog displays aggression is the first step to effectively reducing and preventing it.

Generally, dogs don't display aggressive behaviors for no reason, or just to be difficult. Rather, the behaviors are their attempts to communicate something. If the behavior fails to elicit what he wants, he likely will increase the intensity of his behavior.

In a world where our canine companions are often referred to as our “best friends,” it’s a puzzle that so many dog-human communications (or should I say miscommunications?) result in behavior that we perceive as aggression – anything from a freeze (stillness), hard stare, growl, snarl, snap, or bite, all the way to a full-on attack.

If you asked your dog, he would likely say that these behaviors are just varying degrees of canine communication. He might also say, “My human made me do it.”

All these behaviors are natural, normal social expressions – the dog’s attempt to

communicate something important. Usually, the mildest of the behaviors that people might recognize as aggressive – say, a soft growl – is *not* the first sign of a dog’s aggression. A growl is actually well along a continuum of escalating emphasis in canine communication. A dog who is uncomfortable will generally start trying to communicate his discomfort with much more subtle behaviors, such as avoidance, yawns, evasion of eye contact, lowered body posture, pulling ears back, and rolling on his back.

These behaviors are an attempt to resolve a situation without having to resort to serious aggression. Perhaps it’s a claim to a valuable resource: “I don’t want to share my bone!” Maybe it’s an expression of fear: “You’re making me very uncomfortable, please go away!” Maybe the dog is in pain: “That hurts, please stop!”

If the lower-key communications fail to accomplish their purpose, the dog may feel forced to escalate to more forceful or violent action (such as attacking and/or fighting) to get his point across.

Some or all of the mild, avoidant behaviors ordinarily precede the dramatic behaviors that most humans would recognize as aggression – yet most or all of these behaviors typically go completely unnoticed by many humans.

Alternatively, if these signals are ignored or misinterpreted, the human may respond inappropriately (“Oh, you want a tummy rub?”), forcing the dog to increase the intensity of his behavior and eventually escalate to serious aggression. Growling, snarling, snapping, or biting may seem like the “first signs of aggression” to many humans, but most other dogs (or experienced observers of dog behavior) would have recognized many earlier signs.

CONSIDER IT FROM THEIR VIEW

When dogs display aggressive behaviors, it’s rare for humans to consider whatever the dog was trying to communicate. Instead, the



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behaviors are just considered unacceptable, threatening, and dangerous. Look at it from their point of view, though. Dogs are expected to just deal with all the situations they are put in (including many that annoy, terrify, or intimidate them) and to just get along with every dog or person they meet (including many that annoy, terrify, or intimidate them), without *ever* expressing their annoyance, fear, apprehension, or discomfort using their natural, normal canine communication tools.

We give them valuable resources – delicious food, delightful chew objects, comfortable furniture – and tell them not to covet those resources or protect them from someone who may try to take them away. If a dog *does* attempt to keep something for himself (with a growl or a snarl), he's often punished. Dogs who try to communicate with normal canine language that they need more space, are annoyed or scared, or would like to keep something for themselves, are often labeled “aggressive.”

Consider this idea for a moment: Dogs are often *forced* to escalate – from mild growls, a stiff posture, and hard eyes to a lunge and a snap or worse – because *we just don't listen!*

Granted, we can't know for sure exactly what the dog is saying. As the supposedly more intelligent species, though, and with a better understanding of dogs, we can usually extrapolate something pretty close to the dog's intent. And if we have an idea about what he's trying to say, we can respond appropriately *and* take steps that will reduce the intensity of his communication, rather than forcing him to escalate.

The better we humans are at listening to and understanding “Doglish” the more our dogs will be able to communicate in ways that are less threatening to us while still succeeding in getting their needs and wants addressed.

TYPES OF AGGRESSION

There is no universally agreed-upon scientific list of aggression labels. Various sources offer various names

Past Articles on Aggression

Pat Miller's 2016 book, *Beware of the Dog: Positive Solutions for Aggressive Behavior in Dogs*, is a great resource for owners struggling with a dog who is displaying aggression. Pat has also written a number of articles for WDJ dealing with various aspects of canine aggression; a few of these are listed below. Subscribers can access these via wholedogjournal.com.

- 10/2010: “A New Threshold: Understanding Aggression”
- 12/2011: “The Myth of Dominance”
- 5/2012: “Mean on Leash: Leash Aggression”
- 7/2013: “From Predator to Pal: Living in a Multi-Species Household”
- 3/2014: “Jaws Too: Arousal Biting”
- 8/2015: “On Guard: Resource Guarding”
- 8/2016: “Fear Aggression in Dogs”
- 7/2017: “Managing Dog-Aggressive Dogs in the Family”
- 10/2018: “Fence Fighting”

for different types of aggression, and those labels are constantly changing. There are, however, many commonalities. Below are descriptions of some of the most frequently seen presentations of aggression and the dog's usual motivation for displaying each type.

For the purposes of this general discussion about aggression, I won't be discussing specific solutions for each situation in which a dog might display aggressive behavior, but rather, the broad strokes of the most effective approach.

If you are challenged by your dog's aggressive behavior, I strongly urge you to seek the assistance of a qualified force-free behavior professional who can help you create and implement an appropriate behavior management and modification program.

■ **Fear-related Aggression.** This is by far the most commonly seen type of aggression, and one that humans often responds to most inappropriately. Generally, when a dog shows signs of fear and aggression, she is trying to compel those near her to move away; she needs more space to feel safe.

Many humans assume that a dog who is fearful will choose avoidance rather than aggression – and in many

cases, that's a correct assumption. If, however, a fearful dog is trapped, or has been trapped in the past, she may take a “the best defense is a good offense” approach, especially if there is a history of punishment for her agonistic signals. Keep in mind that “trapped” can include being on leash, being followed and cornered when she tries to retreat, or simply feeling confined in a small enough space that she is uncomfortable (such as your living room).

To make matters worse, it's natural for humans to try to comfort someone who appears afraid – but this is often exactly what the fearful dog does *not* want, especially from a stranger or from someone who may have punished the dog in the past. (See “Fear Aggression in Dogs,” WDJ August 2016.)

The first thing to do with a dog who seems to be aggressing out of fear is to give the dog a little more room – to put more space between the dog and the suspected fear-inducing stimuli. Then, start putting a counter-conditioning and desensitization plan into place, with the goal of changing how the dog feels about the stimuli.

■ **Pain-Related Aggression.** Every animal control officer knows that

when you go to pick up an injured dog that has been hit by a car, you muzzle her first, because pain can easily cause even the nicest dog to bite. Dogs who are in pain generally don't want to be touched and may show signs of aggression in an effort to get people or other animals to leave them alone.

What many owners don't realize is that even less obvious pain can be significant contributors to a dog's propensity to bite. Arthritis, spinal problems, sore muscles, gastrointestinal issues – there are numerous “invisible” conditions that can cause or contribute to a dog's aggressive behavior.



Don't punish this snarl and “hard look” – these are important early warning signs of the dog's extreme discomfort. Dogs who have been punished for behaviors like this are apt to bite without warning the next time. Instead, de-escalate. Put some distance between you, decamp for a less stressful space, and start trying to figure out what triggered his distress.

An aging dog with increasing arthritis pain may begin to growl at approaching children because she knows from past experience that they may fall on or try to play roughly with her. “You're making me very uncomfortable,” she says. “Please don't come any closer.” A protective parent, outraged that the family dog would growl at the child, physically punishes the dog, adding to her pain as well as her anticipation of punishment when children approach, thus increasing the likelihood of her becoming more aggressive toward children, not less.

A far better solution: Any time you suspect your dog may be experi-

encing pain – or for any senior dog, or any dog who hasn't been seen by a veterinarian for a while – arrange a veterinary examination and consultation as soon as possible. Ideally, your veterinarian can diagnose a condition and prescribe medication to alleviate the dog's pain. Also, if necessary, use some basic management tools (such as baby gates, crates, or locked doors) to protect her from the unwanted, sometimes inappropriate, attentions of children.

■ **Play Aggression.** There is a significant difference between aggressive play and play aggression.

Aggressive play is normal and acceptable, as long as both dogs are happily participating. This can include growling, biting, wrestling, chasing, body slamming, and more.

When things go wrong, it turns into play aggression. This can happen when one participant becomes uncomfortable with the escalating level of arousal and tries to signal that she wants to tone things down. If the other dog fails to respond to her signals and continues to escalate, she may aggress in self-defense, in an effort to stop the action. While she is often blamed for starting the fight, it is, in fact, the other dog's fault for failing to respond appropriately to her request to back off the level of arousal.

The first step toward a solution here is to make sure you are pairing compatible playmates, and monitoring the play, giving both dogs a cheerful time-out when arousal levels are escalating to an unhealthy level.

■ **Possession Aggression.** My clients are often surprised, but soon nod in agreement, when I tell them that possession aggression, also called resource guarding, is a natural, normal behavior. If you lock your house when you leave, you are resource guarding! It is also an important survival strategy. In

the wild, if you don't protect your valuable resources, you die.

There is a tragically flawed and arrogant belief among some humans that they have the right to take anything away from their dog any time they please. Some misguided trainers even encourage clients to practice taking their dogs' food bowls away so the dog learns to accept it. Wrong, wrong, wrong! Our dogs should trust that we won't challenge them for valuable items, and we need to teach our dogs a voluntary “Trade” behavior, so we can safely ask them to voluntarily relinquish something when we need them to do so.

Take time to convince your dog that more good things happen when humans are near their food bowl and other good stuff, rather than teaching her that you are an unpredictable threat. (See “Resource Guarding and What to Do About It,” August 2015.)

■ **Predatory Aggression.** Although the result can be devastating for the victim of predatory behavior, this is not true aggression – it is simply grocery shopping. Food acquisition behavior involves a different part of the brain and different emotions from true aggression.

It can be a challenging behavior to modify, but it is possible, depending on the intensity of the behavior, and the ability of the owner to manage the dog's environment to prevent reinforcement for the behavior. The person also must make a commitment to doing the behavior modification work. (See “From Predator to Pal,” July 2013.)

■ **Redirected Aggression.** This behavior occurs when a dog is highly aroused, but thwarted from addressing the object of her arousal.

Fence-fighting is a classic example. Unable to reach the dog on the other side of the fence, the dog may redirect aggressively in frustration to her own canine companion on her side of the fence, or to her own human, who is attempting to intervene in the barrier conflict. To avoid setting up the conflict situation, management is

What Are the Most Aggressive Dog Breeds?

Go ahead: Google “aggressive dog breeds” and see what you get. The lists will be all over the place, from wolf hybrids, to the Tosa Inu, to Bull Terriers and German Shepherds, Rottweilers, Rhodesian Ridgebacks, Boerboels... I could go on and on.

Most of these lists make the mistake of confusing size and strength with aggression. Still, the Schipperke (at just 12 inches and about 15 pounds) is listed on one insurance company blacklist, and I found the Basenji (16 inches and about 24 pounds) on another list. While large, powerful dogs are capable of inflicting greater injuries on a human, there is absolutely no rhyme or reason to the listing of *any* breed as inherently “aggressive.”

For sure, there may be some breeds that are more heavily represented in dog bite, mauling, and fatality statistics. There are a number of reasons for this. Some breeds get listed as “dangerous” a result of just one highly publicized event. After a woman was killed by two Presa Canarios in San Francisco in 2001, the previously little-known breed immediately began appearing on “aggressive dog” lists.

Some breeds are just big and scary-looking. Other breeds are present in greater numbers in the pet-owning population, and thus are more likely to be represented in general bite statistics. Then there is the whole question of breed-identification; these days anything with a big head is likely to be identified in bite statistics as a pit bull-mix,

even if it’s a Boxer mix or some other big-headed breed. And even if it’s a Lab/pit-mix, it will still likely be listed as a pit-mix rather than a Lab-mix.

Finally, certain breeds and types of dogs may be more appealing to – and more likely to be adopted or purchased by – people who are drawn to the idea of having an aggressive dog and who therefore elicit and reinforce aggression.

Of course, if a Rottweiler bites you, there’s a good chance you’ll be injured worse than if a Pomeranian bites you, and the big dog will be perceived as more aggressive because he has the potential to inflict more damage. But aggression is about *behavior*, not size, potential, or breed.

Keep in mind that behavior is always a combination of genetics and environment. A dog representing a breed that has been bred for guarding, placed in an environment that reinforces aggressive behavior, will indeed, become very aggressive. But, placed in an environment that reinforces sociability, he may end up well-socialized and friendly. And a dog who has been deliberately bred for sociability can be placed in an environment that reinforces aggressive behavior and end up very aggressive.

The bottom line is: *breeds* are not aggressive or friendly, *individual dogs* are.

important. If intervention is needed, do it from a distance, to avoid being the target of a redirection.

■ **Social Aggression.** This is today’s term for what used to be called, unfortunately and inappropriately, “dominance aggression,” as a result of a serious misinterpretation of canine behavior. This label applies to situations where there is conflict between the wishes of the dog and her human(s), often where the human attempts to physically manipulate or control the dog (the phrase “manhandling” comes to mind!). A classic example is the dog who growls or snaps when the human tries to pull her off the sofa or bed, or push her into a crate.

As the supposedly more intelligent species, we should be able to get our dogs to want to do what we want

them to do, rather than physically force them. Need your dog to get off the sofa? Toss a treat on the floor. Teach her an “off” cue. Teach her to go to her mat on cue. Teach her to target to your hand, or to an “X” on the wall made of blue painter’s tape. There are lots of ways to invite your dog to move where you need her to without using physical force.

BUT WAIT, THERE’S MORE!

This is by no means a complete list of the various aggression labels. Others in common use include protection aggression, maternal aggression, territorial aggression, barrier aggression, and idiopathic aggression. What you call the behavior is, in many ways, less important than how you interpret and deal with it.

If your dog displays aggressive behavior, get help from a qualified

force-free behavior professional who can help you create and implement an appropriate behavior management and modification program. Modifying aggressive behavior can be challenging. Your behavior professional will educate, encourage, and coach you, and support you when you’re feeling discouraged.

As stated by a meme that has been making the rounds recently, “Remember, your dog isn’t giving you a hard time – he’s having a hard time.” Stay strong, stay positive, understand and empathize with your dog’s hard times, commit to a behavior modification program, and you will be best able to help her overcome her challenges. 🐾

Pat Miller, CBCC-KA, CPDT-KA, is WDJ’s Training Editor and author of *Beware of the Dog: Positive Solutions for Aggressive Behavior in Dogs*. See page 24.



Calcium Is Key

Many owners feed their dogs a home-prepared diet. But if they haven't included the right amount of calcium, they may do more harm than good.

If you feed your dog a home-prepared diet, and you do not include a source of calcium, you could be seriously endangering your dog's health. The ingredients shown here are the basis of a very healthy diet – but without the ground eggshell added in, the diet would be incomplete and imbalanced.

If asked the most common mistake people make when feeding their dogs a homemade diet, I'd have to say that it's not adding calcium. This error is not only common, it's also dangerous, especially for puppies, but for adult dogs as well when too little calcium is given long term. Giving an inappropriate amount of calcium (either too much or too little) can cause orthopedic problems in growing puppies, especially large-breed puppies during the first six months when they are growing the fastest. But giving too little calcium can lead to bone disease and more in adult dogs, too.

It's not surprising to me that many people do not realize the importance of adding calcium when feeding a homemade diet. Most of the homemade diet recipes I've seen online make no mention of added calcium. I reviewed more than 30 books on homemade diets for WDJ some years ago.¹ Of the 24 books I reviewed that were not exclusively about feeding a raw diet that includes bones, only 10 included adequate calcium guidelines!

REASONS YOU NEED TO GET IT RIGHT

I'm aware that some people who feed home-prepared diets rely on annual blood tests to indicate whether their dogs are receiving enough calcium; they think that if their dogs' blood calcium levels are normal, the dogs must be getting the right amount of calcium in their diet. Unfortunately, this is not true.

For both dogs and humans, the body must keep calcium levels in the blood within a specific range to prevent serious health issues, including loss of muscle control, seizures, and even death. Adult dogs are able to control their blood calcium levels by absorbing a greater or lesser percentage of dietary calcium, depending on the amount fed, though this can be impacted by the amount of vitamin D in the diet as well, as vitamin D promotes calcium absorption. Note that puppies do not have the ability to control their absorption of calcium before puberty, and thus can suffer the negative effects of too little or too much calcium and vitamin D very quickly.

Dogs (and humans) also control their blood calcium levels by storing calcium in bones, then drawing it back out when needed – when they aren't getting enough calcium in their diet. When adult dogs are given too little calcium for long periods (like months), they develop a condition called nutritional secondary hyperparathyroidism. In this situation, the body produces excess parathyroid hormone to draw needed calcium from their bones, which can also result in elevated levels of phosphorus in the blood.

Parathyroid hormone is completely different from thyroid hormones; the name is given because the parathyroid glands are located adjacent to the thyroid glands. Parathyroid hormones are responsible for regu-



lating calcium and phosphorus levels in the blood. Hyperparathyroidism (too much parathyroid hormone) can also be caused by a tumor on one of the parathyroid glands (primary hyperparathyroidism) or by advanced kidney disease (renal secondary hyperparathyroidism). Nutritional secondary hyperparathyroidism is usually linked to a deficiency of calcium, sometimes combined with too little vitamin D.

When the body produces too much parathyroid hormone, it causes demineralization of the bones, which may result in lameness, bone pain, swelling, stiffness or limping, not wanting to move, and even spontaneous fractures. Adult dogs may develop spinal deformities, loose teeth, or neurological signs. Puppies are more likely to develop deformities in their legs and joints that may leave them unable to walk normally. If the condition is not corrected quickly, it could lead to long-term orthopedic disorders.

Now that I have scared the pants off you about providing the right amount of calcium in your dog's homemade diet – at least, I hope I did! – what kind of calcium should you add, and how much is the right amount?

FOLLOWING GUIDELINES

With very few exceptions (see “When You Don't Need to Add Calcium,” above right), you need to add calcium to your dog's homemade diet.

Calcium guidelines can be determined in several different ways, including the body weight of the dog, the dry matter percentage of the food, and the calories that the dog needs. Each has its own complications:

When You **DON'T** Need to Add Calcium

Never add calcium to commercial diets that are “complete and balanced” – these already contain the right amount of calcium! Adding calcium to a “complete and balanced” diet would be *particularly* dangerous for large-breed puppies.

However, most *homemade* diets require added calcium with a few notable exceptions. **DO NOT** add calcium to a home-prepared diet if:

- You feed a raw diet that includes raw meaty bones (RMBs) -- parts such as chicken and turkey necks where the bone is fully consumed. Bones are high in calcium and phosphorus; there's no need to add calcium to a diet that includes at least 25 to 30 percent RMBs.
- You use a supplement that is especially designed to complete and balance a homemade diet, such as those made by Balance IT and Just Food For Dogs.
- You use a dog food “base mix,” such as those made by The Honest Kitchen and Sojo's, that you combine with your own added protein source according to the product directions.

When using supplements or base mixes that promise to complete a homemade diet, make certain that the product includes a complete nutritional analysis showing appropriate amounts of calcium. Don't accept the verbal assurances of the company's owners or representatives, or those of pet food store employees; if they can't or won't provide you with complete nutritional analyses of their products, we would not rely on those products for anything more than an occasional meal.

■ Small dogs eat more and have higher nutritional needs for their weight than large dogs do, so you can't use linear guidelines such as “give x amount per 10 pounds of body weight.” Any time you see linear feeding instructions, it's a red flag that whoever is giving the instructions does not understand nutrition.

■ The amount of moisture (water) in food can vary from about 10 percent or less in dry foods (kibble, dehydrated, freeze-dried) to 80 percent or more in wet foods (canned,

fresh, frozen, raw, cooked). You must convert the “as fed” food weight to dry matter (DM) in order to give guidelines based on how much food is fed. Dry matter percentages won't change much when you convert from “as fed” for dry foods, but are usually three to five times as much as the “as fed” percentage for wet foods. Also, because we feed dogs less of high-fat, calorie-dense foods, adjustments need to be made for foods with more than 4,000 kcal/kg DM.

■ Calculating nutritional requirements based on the number of calories your dog needs is the simplest method, but comes with some warnings as well. Caloric needs will vary based on your dog's activity level, metabolism, and more. The right amount to feed will also be affected by how many calories your dog gets from treats, chews, leftovers, and other sources. In particular, inactive dogs who eat less food for their weight than would

Diet Book Reviews

¹ Mary Straus reviewed a number of books about home-prepared diets for dogs in past issues of *Whole Dog Journal*. Subscribers can read the reviews in the following back issues:

12/2010: “Reliable Guides for Raw Diets” – Diets that include raw, meaty bones

1/2011: “No Bones About It” – Boneless diets, mostly cooked

3/2011: “Read All About It” – The best three books on homemade diets

be expected should get most of their calories from a balanced diet in order to avoid nutritional deficiencies.

The National Research Council (NRC) issued updated nutritional guidelines for dogs in 2006. They recommend feeding adult dogs at least 1 mg of calcium per Calorie (kcal), which is the same as 1 gram (1,000 mg) per 1,000 kcal (Mcal).

The nutritional guidelines published by the Association of American Feed Control Officials (AAFCO), which were finally modified in 2016 to reflect the latest NRC recommendations, increased this to 1.25 mg calcium/kcal (1.25 grams/Mcal).

On a dry matter basis, that's 4 to 5 grams of calcium per kilogram of food on a dry matter basis, or 0.4 to 0.5 percent DM.

One other factor affects how much calcium your dog needs: phosphorus. There should always be at least as much calcium as phosphorus in the diet, up to twice as much for healthy dogs (or three times as much for dogs with kidney disease).

Most homemade diets that I've looked at have between 0.5 and 1.25 mg phosphorus per kcal, so giving 1.25 mg calcium per kcal will provide most dogs with an appropriate amount of calcium and a proper calcium:phosphorus ratio.

You will need to know how many

calories your dog is likely to need, based on his *ideal* weight – not his *actual* weight. See *Table I* on the next page for the approximate amounts of calcium to add to homemade diets for dogs of various sizes and various activity levels in order to provide 1.25 mg of calcium per kcal. While nutrient needs don't vary by activity level, dogs who eat more food need more calcium in order to balance out the amount of phosphorus in the diet.

At minimum, give the lowest amount of calcium shown for your dog's ideal weight, even if you find that you need to feed fewer calories than shown to keep your dog at a proper, lean weight. If you must feed a *lot* less to help your dog lose weight or prevent your dog from gaining unwanted weight, it's time to cut back on the number of calories your dog gets from other sources.

The amount of calcium you give does not need to be exact. It's fine to give a little less or a little more calcium than shown. Most commercial diets for adult dogs that I've looked at have between 2 and 3 mg of calcium per kcal (diets designed for puppies or for "all life stages" will have even more). These diets also have an equivalently higher amount of phosphorus.

If you feed a diet that is part commercial, part homemade, adjust the calcium amounts shown in *Table I* appropriately. For example, if you feed half homemade, give half the amount of calcium shown.

TRICKY PUPPIES

All of these guidelines are for adult dogs only. Puppies are trickier. NRC and AAFCO agree that puppies need at least 3 mg of calcium per Calorie (three times the amount of calcium that adult dogs need on a caloric basis).

The maximum amount of calcium that puppies should get is 4.5 mg per kcal (4.5 g/Mcal). It's especially im-

portant not to give too much calcium to large-breed puppies during their first six months, as they are the group most likely to develop bone and joint abnormalities when given the wrong amount of calcium and phosphorus.

Puppies also need more phosphorus than adult dogs do. Never add plain calcium to a puppy's homemade diet. Puppies need bone meal or some other type of supplement that provides both calcium and phosphorus, in order to provide the correct amount and ratio of calcium to phosphorus.

WHAT FORM OF CALCIUM SHOULD YOU USE?

There are many forms of calcium that can be added to your home-prepared diet to meet your dog's requirements. Any form of plain calcium, without other ingredients such as vitamin D, is fine. Dogs do need vitamin D, but since dogs need more calcium but not more vitamin D than people do, the amount of vitamin D that you would end up giving when using a combination product would be too high.

■ **Calcium carbonate** is usually the cheapest and the easiest to give, as it has more elemental calcium than most other calcium compounds, so you will need to add less powder to the food.

■ One easy way to provide calcium is to use **eggshells** that have been washed, dried, and ground to powder in a clean coffee grinder or blender. One large eggshell will make about one level teaspoon of eggshell powder weighing 5.5 grams; this will provide approximately 2,000 mg calcium:

- 1/8 teaspoon eggshell powder provides about 250 mg calcium
- 1/4 tsp = 500 mg
- 3/8 tsp = 750 mg
- 1/2 tsp = 1,000 mg
- 5/8 tsp = 1,250 mg
- 3/4 tsp = 1,500 mg
- 7/8 tsp = 1,750 mg
- 1 tsp = 2,000 mg

Some people like to give their dogs whole eggs with the shell, but



Calories from treats, chews, and shared snacks can add up quickly, especially for small dogs and couch potatoes, unbalancing whatever type of diet you feed. Limit treats to healthy foods in small amounts. Dogs are happier to get two or three tiny treats than one large one!

I don't think that's a good way to ensure that your dog gets the right amount of calcium. The calcium in eggshells that have not been ground to powder may not be absorbed, particularly if you notice any bits of shell in your dog's stool. If it is absorbed, you may end up giving too much calcium, especially to smaller dogs.

It's okay to give a dog a whole egg, including the shell, as a treat on occasion, but when using eggshells to provide dietary calcium needed to balance out a homemade diet, it's safest to grind the shells to a powder.

■ If you use a calcium supplement that also includes phosphorus, such as **bone meal powder** or **dicalcium phosphate**, you will have to give more calcium than if you use a plain calcium supplement in order to keep the calcium:phosphorus ratio in the proper range. To determine how much to give, you must first subtract the amount of phosphorus from the amount of calcium, then use the remaining amount of "extra" calcium to calculate how much to give based on *Table I*.

For example, if the bone meal supplement you're using has 800 mg calcium and 300 mg phosphorus per teaspoon, there's 500 mg "extra" calcium to use to calculate how much to give. If your dog needs 1,000 mg calcium added to his diet based on *Table I*, you would need to give two teaspoons of bone meal powder (500 mg extra calcium per teaspoon) in order to provide an appropriate amount of calcium while ensuring that the calcium:phosphorus ratio remains in the proper range.

Note that bone meal products designed for humans may not tell you the actual amount of calcium and phosphorus they provide, but will instead give you percentages of daily recommended values for adults.

For example, NOW Foods Bone Meal Powder says that 1 level teaspoon provides 80 percent of the recommended daily amount (RDA) for calcium, and 30 percent of the RDA for phosphorus. The RDA for both calcium and phosphorus for

Table I: Calcium Supplementation Goal: 1.25 mg Calcium per kcal Fed to Adult Dogs

Weight of dog (lbs)	INACTIVE/SENIOR/ PRONE TO OBESITY		NEUTERED/ TYPICAL ADULT		INTACT/ACTIVE ADULT (NRC DEFAULT)	
	Daily Calories Avg kcal	Calcium mg (rounded)	Daily Calories Avg kcal	Calcium mg (rounded)	Daily Calories Avg kcal	Calcium mg (rounded)
5	166	200	215	275	241	300
10	268	350	349	450	389	500
15	361	450	470	600	525	650
20	449	550	584	750	653	800
25	534	675	693	850	775	1000
30	615	775	800	1000	893	1100
40	772	975	1003	1250	1121	1400
50	922	1150	1199	1500	1339	1700
60	1067	1350	1389	1750	1551	1900
70	1209	1500	1573	2000	1758	2200
75	1279	1600	1664	2100	1860	2300
80	1348	1700	1754	2200	1960	2500
90	1484	1850	1932	2400	2159	2700
100	1618	2000	2107	2650	2354	3000
125	1852	2300	2380	3000	2649	3300
150	2124	2650	2729	3400	3038	3800
175	2384	3000	3063	3800	3410	4300
200	2635	3300	3386	4200	3769	4700

humans has been 1,000 mg (1 gram), so 80 percent would be 800 mg and 30 percent would be 300 mg.

This calculation will soon become more complicated, however, as the FDA recently increased these recommended amounts to 1,300 mg calcium and 1,250 mg phosphorus. New labels must reflect this change by July 2020. If NOW Foods does not change their formulation, the same product would now show that it provides 62 percent RDA for calcium and 24 percent RDA for phosphorus.

Many bone meal products provide about twice as much calcium as phosphorus. In this case, you can just double the calcium recommendations shown in *Table I* to determine how much to give.

If you use bone meal powder to provide calcium, look for brands that have been tested to show that they contain low levels of lead. Never use bone meal products intended for fertilizer.

■ **Dolomite** is another type of calcium supplement that may contain unacceptably high levels of lead.

■ **Plant-based calcium supplements** show considerable variety in the amount of lead they may contain; contact the company to ask for test results before using one of these supplements on a daily basis.

Again, these guidelines are only for dogs who are fed a homemade diet that lacks an adequate source of calcium, such as raw meaty bones or a supplement designed to balance a homemade diet. There's a lot more to feeding a homemade diet that we'll try to address in future articles, but getting the calcium right is a big step in the right direction of feeding a complete and balanced diet. 🐾

Mary Straus is the owner of DogAware.com. She and her mixed-breed, Willow, live in the San Francisco Bay Area.

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Former foster puppy and current cover dog Nova (right), and one of her siblings, October 2018



BOOKS AND VIDEOS

Sassafras Lowrey, CTDI, is the author of the forthcoming books *Tricks in the City: For Daring Dogs and the Humans That Love Them*; *Healing/Heeling*; and *Bedtime Stories For Rescue Dogs: William to the Rescue* with illustrator Lili Chin. You can find all of her books for pre-order at Amazon.com and her website SassafrasLowrey.com

WDJ Training Editor Pat Miller is author of many books on force-free, pain-free, fear-free training, including:

- *Do Over Dogs: Give Your Dog a Second Chance at a First Class Life*
- *How to Foster Dogs*
- *Play With Your Dog*
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and her most recent:



All of these are available from wholedogjournal.com



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