



A monthly guide to natural dog care and training

May 2006 \$5.95

### **FEATURES**

### 3 Safe Pain Relief

A committed dog owner devoted more than a year to confirm what her dog had already shown her: This arthritis pain-relief product really works.

### 8 Bully for You!

Why (and how) you should intervene if your dog seems to enjoy picking on others.

### 11 A Water-Lover's Worry

Giardia is much more prevalent in dogs than previously thought. And it could be causing your dog's recurrent diarrhea.

### 15 Control Yourself!

The many benefits of teaching your dog some self-control skills.

## 18 Basic Immunology

How to tell when a dog's immunity is "all systems go!" (Plus, tips on how to support the immune system for optimal health.)

An older pooch's

# pain reliever . . . page 3

### **ALSO IN THIS ISSUE**

- 2 Editor's Note
- 24 Product and Expert Resources





## All Right, Already

## A product almost everyone seems to endorse.

### BY NANCY KERNS

ur publishing headquarters is located in Connecticut. I work from a home-based office in the San Francisco Bay Area. As a result, I've met some of my "co-workers" only once or twice in almost 10 years, but we communicate often via phone and e-mail. That's how I first heard about Brittany, a 10-year-old Beagle belonging to Jennifer Jimolka, an executive assistant on the headquarters' staff.

Jennifer had taken a call from someone who was interested in sending literature and samples of an arthritis-relief product called "Dog-Gone Pain" (or "DGP") to the Whole Dog Journal. Jennifer gave the caller my address, but, as the owner of an older, arthritic dog, she asked if she could receive information about the product, too! The caller turned out to be from American BioSciences, the sole U.S. distributor of DGP, and she offered to send a sample of the product to Jennifer for her dog.

I received a sample and some product literature, and filed it away. Then I started getting calls and e-mail messages from Jennifer about Brit's near-miraculous response to the DGP. "You *have* to do a story about this!" Jennifer would tell me. "Brit is doing much better now that she's getting DGP. She's not so sore after a good run, and she can jump on the bed again!"

Later, I heard that Jennifer was telling all of her friends about DGP. She wrote me a note about one of her friends, an owner of Cavalier King Charles Spaniels, who are now receiving DGP with great results. Most recently, Jennifer told me, "This is one pill I feel very strongly about and make sure Brit gets every day."

The next person to start pushing me for an article about DGP was our Training Editor, Pat

Miller. Pat heard about DGP through an e-mailed request for participants in a study of the herbal pain reliever. Pat has an arthritic Kelpie who needed Rimadyl in order to get up easily, so she contacted the coordinator to see if the dog could be included in the study. Soon I started receiving e-mails from Pat, too, about how well Katie was responding to DGP.

So when I received an e-mail from the study coordinator, Jan Skadberg, asking if WDJ would be interested in being the first publication to receive the study results, I was like, "All right, all right already! I'll publish an article about DGP!"

Seriously, I was honored to have been given the opportunity to publish the study's findings. But when I received them, I found myself having questions about the study's coordinator. I called Jan, and quizzed her very closely about her connections to American BioSciences (she has none) and her motivation for putting such an enormous amount of time and energy into a study that would clearly benefit the distributor of the product if DGP performed well.

As is often the case, there was a dog in the answer. Jan felt a deep debt of gratitude for the relief her beloved canine companion, James, received from DGP in his final years. She chose



to pay back that debt by testing the product further and by publicizing the results. At my request, her story, and James, became part of the article I asked her to write. It appears on the facing page.

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

## **Safe Pain Relief**

## Check out this incredibly promising herbal arthritis pain-relief product.

### BY JAN SKADBERG

s the sole practitioner of a small animal practice encompassing massage, acupressure, homeopathy, and custom-blended flower essences, I'm always looking for products that may be effective for my clients' animals. The most obvious, positive, long-lasting results I have seen have come from the use of acupressure, massage, and homeopathy. Yet when I heard from a third client about a product called "DGP" (short for "Dog Gone Pain"), I decided it was time to investigate - especially after witnessing how the client's dogs who received the supplement enjoyed an increase in flexibility, decrease in joint pain, and obvious elevation in spirits.

I researched the ingredients in the DGP product and felt comfortable with them (see the ingredients list in "What Is DGP?"). I decided to try DGP on James, my 110-pound Greater Swiss Mountain Dog. If anyone



### WHAT YOU CAN DO . . .

- Consider trying DGP if your dog has been diagnosed with arthritis.
- DGP can affect the absorption rate of drugs that your dog may already be receiving. If your dog gets prescription medications, discuss the supplement with your veterinarian, so she can adjust your dog's meds if needed.
- Chart your dog's mobility and attitude before and during supplementation, to gauge its effectiveness. Improvements may be gradual but steady.

needed relief from arthritis, it was James.

James came to me as a rescue at  $3\frac{1}{2}$  years of age. Having lived in a crate his entire life prior to his rescue, his back, rump, and thighs were terribly atrophied. I arranged for him to receive treatments by a chiropractor (which relieved much of his back pain and muscle spasms) and an acupuncturist, and placed him on a raw diet with supplements. Within a year, with a lot of physical therapy, James was easily able to take long hikes in the mountains with me.

But at about 5½ years of age, he began having an increasingly difficult time sitting down and standing up, and wasn't as mobile, flexible, or as happy as he had been at his peak. I knew that giant breeds can exhibit health problems at what most dog owners would regard as an early age, and that they don't always live very long, so I chalked up James' problems to getting older.

Since I was unwilling to use the commonly prescribed pharmaceuticals, I began the process of investigating a more holistic brand of anti-inflammatory, one without the risk of the NSAIDs (non-steroidal anti-inflammatory drugs) or corticosteroids. I tried two different nutraceutical products, without seeing any noticeable improvement in James' pain and mobility.

That was about the time I heard about my clients' success with DGP. I ordered some and started giving the supplement to James the moment I received it.

The results were remarkable and obvious. Within five days he was an obviously *much* happier dog; he was running around the backyard like a puppy! What was most amazing, though, was the change in his spirit. He was back to the old James, with no obvious sign or symptom of pain.

I kept giving DGP to James for the rest of his life. We enjoyed another two and a half years together before he succumbed to bone cancer at age 8. I credit the DGP with helping him feel good – perhaps even painfree – throughout his illness.



Author Jan Skadberg and James, the dog that sparked her interest in DGP.

### Responsibility

There is a lot to be said for a positive anecdotal experience. My three acupressure clients were sold on DGP, based on their dogs' experiences, and I was certain the tablets did wonders for James throughout the two-plus years he received them.

But I am also a practicing RN with 30 years of hospital experience. I understand that just because one dog – or four dogs – benefit from a therapy does not mean it will work for all or even most dogs. I appreciate and rely on data-driven, scientifically based protocols and studies to inform the decisions I make for myself and my animals – and so it gradually occurred to me that I should conduct a study involving more dogs and DGP. In fact, I felt I had a responsibility to do so.

Amazingly, I was taken seriously when I called American BioSciences (the company that holds the sole rights to distribute DGP in the U.S.) and offered to facilitate a study of DGP. Stephanie Johnson, product

manager for American BioSciences, readily agreed that a formal (if small) study would help the company legitimize the terrific anecdotal accounts so frequently recounted by their grateful customers. Johnson didn't hesitate even when I told her my goal was to write an article about the study results, regardless of the outcome. Over successive conversations, Johnson secured her company's interest in and commitment to the project.

Then I had to find out exactly how one goes about constructing a research study!

Johnson had some ideas, I had some ideas (as an avid reader of medical studies for humans and animals), and I also asked a number of people I knew and respected about the most useful protocols for my proposed project. My friends and professional mentors, the well-known acupressure in-

structors and book authors Amy Snow and Nancy Zidonis, helped me a great deal, as I strived to design a trial that would demonstrate whether or not DGP really helped dogs with arthritis — and if so, how much. I wanted the dogs to be observed in their homes, throughout the course of their regular activities, by the people who knew them best — their full-time guardians. I wanted the owners to administer the supplement regularly, and then reliably report on any changes they observed in the dogs.

We agreed that the dogs in the study should have really noticeable gait, posture, and/or behavior problems that were verifiably attributable (with a veterinarian's diagnosis) to arthritis. They should be of different breeds, sizes, ages, and activity levels, and if possible, be from different parts of the country.

### What Is DGP?

Dog-Gone Pain, or DGP, is a nutraceutical that contains naturally occurring substances with medicinal benefit. It is manufactured in Australia, in an approved TGA facility (the Australian equivalent to the US FDA). The manufacturer claims that the herbs used in DGP are raised using standardized growing techniques, thereby ensuring efficacy from year to year, and that each ingredient is "human grade" and grown without pesticides or herbicides.

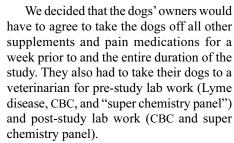
DGP offers a banquet of anti-inflammatory herbs useful in aiding multiple systems – respiratory, circulatory, digestive, thermoregulation, liver, and gall bladder – which have a tendency to be compromised as the dog ages. This may be the reason why animal guardians witness a revitalizing effect when their dogs are given DGP.

Each DGP tablet contains a proprietary blend of native Australian edible herbs along with compounds used in European (and other) medical traditions, including:

- Feverfew, an anti-inflammatory and pain reliever;
- Celery seed, an all-around calmative and anti-inflammatory;
- Boswellia, a strong anti-inflammatory and analgesic;
- Bromelain and papain, digestive aids;
- Corydalis, a tonic for the circulatory system;
- Cayenne, for gastrointestinal health;
- · Wheatgrass, rich in nutrients and minerals; and
- Turmeric, a potent anti-inflammatory and digestive aid.

In addition, DGP contains calcium, magnesium, phosphorus, zinc, and other bone-building minerals. DGP also contains shark cartilage that is produced without the use of toxic solvents. Shark cartilage is an excellent dietary source of chondroitin sulfate and other glyco-aminoglycans that rebuild cartilage.

The manufacturer of DGP warns, "If your dog is already on medication, discuss DGP with your veterinarian before using. The enzymes it contains have the potential for altering the rate of absorption of medications such as antibiotics, anticoagulants, and NSAIDs. Also, several of the ingredients have anti-inflammatory properties that could possibly enhance the blood thinning properties of anticoagulant drugs."



American Biosciences agreed to pick up the tab for all this veterinary work, and to provide the owners with DGP for the study dogs at no cost.

Once I had the study architecture planned, I began to solicit dog owners and veterinarians for participation. Vets referred some clients. Friends and fellow acupressure practitioners put out the word on various canine listserves and bulletin boards. I talked to or exchanged e-mail with hundreds of people who were interested in the study, and finally selected 14 from a list of 87 people who expressed a strong desire to participate. I had to disqualify two dogs (a Beagle and a Lab) whom I had originally accepted for the study after pre-study testing demonstrated they were positive for Lyme disease.

Enthusiasm ran particularly high among owners of Golden Retrievers and Labradors – dogs with a high incidence of certain types of arthritis in their elder years. Because I wanted to include a range of dog breeds, sizes, activity levels, and primary diagnoses, I accepted only three Goldens, one Labrador, and one Lab-mix. I also included a Sheltie, a Pembroke Corgi, an Australian Kelpie, a terrier-mix, two Beagles, a 45-pound mixed breed, a Jack Russell Terrier, and an English Setter. The youngest dog in the study was 5 years old and the oldest was 13, with a mean age of 9 years of age.

I supplied each of dogs' guardians with a packet of paperwork to fill out. The bulk of the work came in the beginning, as I asked them to describe their dogs' health status in as much detail as possible, including information about age, weight, medical history, exercise/activity level, pack status, diet, appetite, elimination habits and characteristics, and much more.

I also asked the owners to rate, on a scale of 0 (defined as clinically normal) to 4 (defined as nearly incapacitated), their dogs' lameness/ability to bear weight, joint mobility, pain on palpation of joints, and willingness to bear weight on their "good" limbs. I provided them with instructions on how to examine and handle the dog to assess these criteria.



With the pre-treatment paperwork out of the way, the weekly assignment for the owners was much less involved. At the end of each week I asked the owners to methodically assess the overall condition of the dogs: where the pain seemed to be located, what the dogs' movement and gaits were like, how much flexibility they had, and how their behavior, attitude, or mood seemed. I also asked them to note any adverse reactions the dogs displayed – lack of appetite, vomiting, diarrhea, behavior change, dermatitis, or anything else.

At the end of the study, the owners again rated (on a scale of 0 to 4) the dogs' physical abilities.

The recommended dosage for DGP is one tablet per 30 pounds of the dog's body weight. Due to the severity of arthritis, all dogs in this study were started on a double-dose regimen for the first two weeks, then given the normal dosage for the remainder of the six-week trial.

### **Study findings**

I need to say, first off, that *all* the dogs in the study showed improvement while taking DGP. The first and most obvious sign of improvement in 100 percent of the participants was an elevation of spirit – the dogs seemed happier. This occurred within the first week for all the dogs. Was this due to

decreased pain or a balancing effect of the herbs on all of the body systems? I don't know. Three participating owners queried me as to whether there are any mood elevators in the ingredients of DGP; there aren't.

All of the dogs' owners reported seeing noticeable improvement in the dogs' mobility, soundness, and activity levels while on the DGP. The mean onset of musculoskeletal improvement was one to three weeks, with only one dog waiting to see a peak cumulative effect in the sixth week. The composite scores reported by all of the dog owners improved by at least one notch on the 0 to 4 scale; 70 percent improved by two or more notches.

## The Reports: "Improvement Seen in 100 Percent of Study Dogs"

Jessie is an 8-year-old, 85-pound Golden Retriever who participates in low-impact agility and loves to chase lizards in the yard. At nine months of age, Jessie had a triple pelvic osteotomy only on one side, as the other side was already too arthritic to benefit from the surgery. Prior to the study, she received Glycoflex III and aspirin as needed for pain relief. Her pre-test discomfort included having a difficult time getting up on the

bed and limping on walks of one-half to one mile in duration. She had little flexibility in her hips and favored her right hind leg.

Reported results of DGP: The first three weeks showed a dramatic increase in Jessie's activity level, and by week three she was able to hop on the bed. Her guardian writes, "The DGP certainly worked better than any of the several brands of glucosamine/MSM/chondroitin/vitamin C products we have tried."



Monty is an 8- or 9-year-old, 95-pound old blue Australian Cattle Dog/Lab mix. Monty is a free-range dog who has slowed considerably and often holds one leg up in pain, hopping on three legs. Prior to the study, he was being given a traditional Chinese herbal remedy, chondroitin, and occasional vitamins. He also received acupuncture as needed. His pre-study symptoms included back and hip pain. He often groaned and tried to find a position on his couch to relieve his back pain. His guardian also stated Monty slept for increasingly long periods.

**Reported results of DGP:** Monty exhibited an estimated 75 percent reduction in his back soreness and a better attitude. His guardian reported that Monty sleeps less and is getting along better with the other family dog. She also estimated that Monty had a 75 percent increase in his activity level and a 75 percent



improvement in his gait, movement, and flexibility; he even uses his lame leg more often. Monty now spends about 95 percent of the day outside; prior to receiving DGP, he opted to spend about 60 percent of his time in the house.

**Homer** is a 12-year-old, 45-pound mixed breed. Homer has had ACL (anterior cruciate ligament) surgery on both hind legs. Prior to the study, his discomfort also encompassed his front legs; they were stiff and he limped.

**Reported results of DGP:** Post-treatment, his guardian observed, "Homer seems happier and more carefree." She now sees Homer run.

Interestingly, Homer's owner initially elected not to continue Homer's DGP regimen after the study. I learned later (from her veterinarian) that there was a sharp increase in Homer's limping and leg pain after the DGP was stopped. His owner restarted the supplement and still gives it to Homer today.

**Chloe Rae** is an 11-year-old, 13-pound Jack Russell Terrier with attitude! Prior to the study, Chloe exhibited moderate arthritis stiffness in her hind legs and mid- to rear-back.

**Reported results of DGP:** Post-DGP treatment finds Chloe "full of energy and active and wound up until bedtime." Her guardian reports that Chloe's hind/rump shows a marked in-



crease in flexibility. Her gaits are loose, and she now stretches for longer periods of time. Chloe's attitude seems spunkier, bossier, and more demanding, which her owner believes reflects Chloe's good mood. "By week six, the pain in Chloe's hindquarters was pretty much gone and she is walking and using stairs with much greater ease."

**Toto** is a 35-pound, 12-year-old terrier-mix. She has generalized arthritis in the hips and front and back legs, and has difficulty is getting up and lying down.

Toto is the only dog that was taken off DGP, at week two. After five days on DGP, she vomited and had soft stools, and there was a marked increase in her well-documented environmental allergies (chewing of feet, accompanied by an increase in watery eyes). I instructed Toto's guardian to stop the DGP until Toto's symptoms subsided; two days later she resumed DGP.

Only one dog experienced adverse effects that could be related to the DGP; we removed the dog from the study in the second week due to reactions to the supplement, including vomiting, soft stools, and a marked increase in her environmental allergies (chewing of feet, accompanied by an increase in watery eyes). Her owner deeply regretted having to stop the DGP, as the dog's arthritis symptoms markedly lessened while receiving the DGP, but of course, the adverse reactions warranted our actions.

It was also notable that there was no change in any of the participants' pre- and post-study lab values. Granted, this was only a six-week trial, but it was important to document whether DGP caused any of the possible side effects caused by NSAIDs,

namely liver, kidney, and hematologic abnormalities. None were seen.

In addition to the striking improvements in the dogs' movement, several other findings in this study also bear mentioning. One is the fact that almost all of the participants assumed their dogs' infirmities were just the natural progression of aging and that little could be done to offset the symptoms – just like I had, with James. It was not until we had seen our dogs' improvement on DGP that we realized how crippled our dogs actually were prior to starting the supplement.

In fact, *three* of the participants elected to discontinue the DGP after the study was over – and then quickly started their dogs back on the supplement when the dogs' arthritis signs dramatically resurfaced. Each

expressed that they hadn't realized how powerful the effect of DGP was until they stopped the supplement. Fortunately, the dogs were judged by their owners to be restored to a peak level of soundness and comfort within two days of being given DGP again. With the exception of the (possibly allergic) dog with the adverse response, all of the dogs are still receiving DGP today.

Last, what was glaringly obvious in this study is the effect of pain on a dog's behavior. Qualified by their severe arthritis, the dogs were all described by their owners before the study as sleeping a lot, depressed, withdrawn from socializing with their people and pack, irritable, grouchy, and less mobile. But every single dog in this trial demonstrated an improvement in mood,

### (THE REPORTS, CONTINUED FROM PREVIOUS PAGE)

Three days later Toto again began vomiting clear secretions and had soft stools. At this point I recommended discontinuing the study and Toto's guardian complied.

**Reported results of DGP:** Her guardian writes that in the eight days she took DGP, Toto experienced more spring in her step and became more puppy-like and playful. She regretted having to take Toto off the DGP, but we knew it was the right decision. There is always the potential for an allergic reaction from any drug, food, or nutraceutical that is ingested, and I suspect that Toto was allergic to one of the herbs in DGP.

**Katie** is a 13-year-old, 43-pound Australian Kelpie who, prior to the study, was on Rimadyl and glucosamine for overall stiffness and arthritis pain in her front paws. Prior to receiving Rimadyl, Katie had some difficulty in getting up. Her past medical history included, at age two, being hit by a car at age two and sustaining a broken hip, which was surgically pinned.



**Reported results of DGP:** The swelling in Katie's front paws decreased and seemed less painful while receiving DGP, but, interestingly, her owner noticed signs of more discomfort in Katie's hip.

The biggest change for Katie was her attitude. Her guardian wrote, "Whereas,

pre-treatment, Katie was withdrawn and cranky with other dogs and touchy about handling, post-treatment Katie is cheerful, sometimes exuberantly so. She is much more social with us as well as our other dogs and less touchy overall."

Katie's owner has elected to keep giving DGP to Katie, but also saw fit to administer low doses of Rimadyl during the most bitterly cold and damp winter months, when Katie's arthritis is most painful. She hopes to reduce or eliminate Katie's Rimadyl dosage again as the weather gets warmer.

**Einstein** is an 11-year-old, 60-pound Golden Retriever with a diagnosis of moderate to severe arthritis of the right shoulder and elbow area. Prior to the study, Einstein was given Rimadyl and



Glycoflex, which brought him relief. However, his guardians were concerned about potential adverse effects caused by NSAIDs.

**Reported results of DGP:** His guardians reported that, while on DGP, Einstein expe-

rienced less limping and was just as active as he was when he was being given Rimadyl and Glycoflex. However, Einstein was the second dog in the study to have his guardians discontinue the DGP after the study; they suggested that the supplement was not as effective as they hoped it would be. Within a day and a half, however, his discomfort and stiffness greatly increased, and they elected to restart his DGP. His symptoms subsided within two days, and he remains on DGP today.



**Tess** is a 12-year-old Pembroke Corgi weighing 24 pounds. She has severe spondylosis (spinal osteoarthritis) throughout her entire spine, and her mobility and exercise have dramatically reduced over several years.

Prior to the study, Tess was being given Metacam (an NSAID), but still exhibited constant pain and limped after

small amounts of exercise. Her guardian wrote, "From time to time, Tess has difficulty getting up and down stairs. Her front legs move stiffly, she drags her right foot, and her rear legs are weak. She hates to be petted and is increasingly aloof, spending more time away from the family. She is tense and moves around as little as possible. Tess is high-strung and exhibits violent barking."

**Reported results of DGP:** Tess' post-treatment observations were quite remarkable. Her guardian describes her as spunkier, more pleasant, and more relaxed. "Tess moves more easily, and she is able to hold her head up more. She smiles now! Her eyes are brighter, she startles less, and spends more time close to family members. Her activity level has increased, and she just seems more up for play."

Tess is still suffering from severe spondylosis, so her movement will always be less than optimal, but her guardian describes her as "clearly in less general discomfort." demeanor, and/or attitude within the first two weeks of taking DGP.

### **Hopes for future**

This study validated my findings with James. It showed me that DGP enhanced the lives of severely arthritic dogs on many levels. In the majority of the dogs sampled (93 percent), DGP was judged by the dog owners to be as or more effective as the NSAIDs and pain medications the dogs had been given prior to the study. At this point, I feel confident in suggesting it to the guardian of any dog with arthritis. (Note: See the manufacturer's warning, in "What Is DGP?")

The main caution I relate to dog owners

who are considering DGP for their dogs is to make sure to initially limit the dog's physical activity once he has been on DGP for a few days, until he gets used to feeling good. I have often seen arthritic dogs feel so much better, that they (and, unwittingly, their owners) overexercise and end up in real pain, with muscle soreness and stiffness for days. This can be avoided if the dog's activity is moderated.

My hope now is that someone will see fit to conduct a large-scale study of the supplement. A number of holistic veterinarians I know have expressed an interest in participating.

No single product can be considered a

cure-all for every canine musculoskeletal ailment. That said, I think that DGP is a great product to try as a *first* resort for those dogs with mobility/arthritis issues, and whose guardians do not want to assume the risk of the side effects of corticosteroids or NSAIDS.

Jan Skadberg is a registered nurse and a certified legal nurse consultant. She also offers acupressure and massage for canines from "4 Paws," her practice in Charles Town, West Virginia.

**Sparki** is 12-year-old, 40-pound Sheltie who has exhibited generalized arthritis pain in all extremities. She has difficulty climbing up and down stairs. Prior to the study, she was often found hiding in the closet, sleeping most of the day, and disliking any touch. She also has left shoulder and hip dysplasia.

Reported results of DGP: Her guardian noticed Sparki's mood change during the first week of treatment with DGP. "She is starting to be friendly with everyone and has stopped hiding in the closet," she wrote. "She went into the exercise pen with the other two dogs and even shared a couch with them. Sparki has started to follow me around the house and even goes up and down the stairs to the basement. She barks for attention and wags her tail, where she used to be quiet and hide." Sparki's joint pain and muscle tightness appears to have decreased greatly while on DGP.

Jackie Beagle is a 40-pound, 5-year-old Beagle. He was hit by a car at one year of age and suffered a broken neck and partial paralysis of the left side of his face. He has severe arthritis in his neck and shoulders. Pre-study radiographs revealed that he also had severe bilateral hip dysplasia. His owner reported that Jackie did not display enthusiasm for life, was irritable, had withdrawn from most social contact, and was mostly inactive.

Reported results from DGP: Jackie Beagle was the only dog in the study whose owner did not report positive results within the first two weeks. At three weeks, she noted that Jackie seemed to be moving a bit faster, had slightly greater range of motion in the front legs, was participating more with the other dogs, even



initiating a game of tug and chasing another dog in the backyard. In week 6 she observed, "Jackie is very social, upbeat, and initiating play with other dogs."

The post-study comments from Jackie's owner were strikingly different from her pre-study observations. "He is more tolerant of other dogs, more cheerful, and actually asks for play and attention. He has spurts of high activity – running, tugging, and zooming around the yard." However, she notes, "He still sleeps a lot."

Commander is a 12-year-old English Setter who lives for grouse and woodcock hunting every fall and winter. Prior to the study, he had slightly stiff and weak hips and moved with a strange gait, leading strongly with his front legs and shuffling his back legs in a splay-footed manner. Commander needed help in jumping onto the bed and into the car, walked around fallen logs rather than jumping over them, and had noticeable muscle atrophy in his hips and rear legs. His owner reported that Commander tired easily when hunting, his stamina had decreased, he was grouchy with his younger pack mates, and he groaned when lying down.

**Reported results from DGP:** In week four of the study, Commander's guardian reported that the dog "is more lively now, energetically hunting and jumping over logs and lasting longer on his turn for hunting. He gets in and out of the car and onto the bed with greater ease. He hunts a little longer between rests and with



more energy. Commander's ability to jump and climb uphill has improved." In week five, she wrote, "Wow! Best day hunting in a long time. Ran around like a younger dog. He still gets tired and out of breath, but Commander is definitely stronger and more enthusiastic."

**Ben** is an 80-pound, 6-year-old Golden Retriever who has had multiple surgeries – for bilateral hip dysplasia, both shoulders, and both knees (bilateral ACL). As a result of his multiple surgeries, he lived in a crate for his first year of life to facilitate his healing. He plays with his sibling Golden, mostly lying down. Prior to the study, Ben had difficulty getting up, and never stood using his back legs. His guardian wrote, "Ben is a happy dog, but many days you could tell he was not feeling well."

**Reported results of DGP:** Ben's results were dramatic. His guardian wrote, "Ben feels much better, gets up with ease, and puts weight on his back legs. He is even happier now and even runs; he swoops around the backyard and gallops up the steps." Ben's improvement peaked at weeks three and four, when his guardian wrote, "Ben is much more playful, is smiling and *happy!*"

