As owners of athletic dogs, we are always looking for methods to improve their strength, power, and endurance. This is even truer in dogs that have suffered an injury or undergone surgery to correct a problem and are working toward a return to agility. As an adjunct to agility training, strengthening exercises should be done with a healthy dog on a regular basis, and absolutely must be done before an injured dog returns to agility.

This month we’ll discuss exercises for increasing hind-end awareness as well as exercises for increasing strength of the gluteal and hamstring regions.

### Rocking the hips
- With the dog standing, rock the dog’s hips back and forth until the dog tires. Fatigue will be evident when the dog sits down, moves away from you, lies down, or refuses to continue.
- This exercise can be performed several times a day.
- The dog may be further challenged by placing him on an uneven surface, such as a dog bed, mattress, sand, piece of foam, and so on.

### Rocking on a Theraball
- Place the dog’s forelimbs on a Theraball while his hind limbs are on the ground and rock the dog back and forth to challenge his balance.
- Perform this rocking motion on a good surface to avoid slipping.
- This activity should be done until fatigue and then may be repeated.
- Fatigue may be reached after a few seconds or a few minutes.

To Increase Hind-End Awareness

The exercises used to increase hind-end awareness strengthen the muscles dogs use for balance and proprioception. These muscles have Type I muscle fibers or static muscle fibers. When the fibers are weak, they fatigue very quickly. We use these muscle fibers to help us stand up. Think about how you feel when you have had the flu or been in bed for a few days. When you tried to stand up, you probably wobbled a bit. Just a short stay in bed can alter these muscles. Fortunately, they are easy to work on and can be focused on consistently. The exercises below should be initiated slowly but may be performed on a daily basis. Although these exercises may seem simple, your dog will be doing a significant amount of work.

Exercises to increase hind-end awareness are appropriate for:
- Teaching hind-limb awareness to young dogs
- Improving hind-limb recognition in adult dogs
- Improving physical coordination on obstacles
- Recovery from hind-limb injuries
- Recovery from cruciate surgeries and cruciate injuries
- Hip dysplasia
- Recovery from neurological conditions
Walking in figure eights and through weaving cones

- When walking in a figure-eight pattern, start out with a large pattern: 6’ to 8’ from point to point for a small/medium dog and 10’ to 12’ for a larger dog.
- When walking through weaving cones/pylons or poles, set them at 2’ to 3’ apart for small dogs and 4’ to 5’ apart for large dogs. The cones or poles help the dog by giving him an object to walk around.
- Place the dog on a leash so as not to confuse any of these activities with competition weave poles and have him walk, not run, through initially.
- Increase the activity level by trotting the dog instead of walking, and by shortening the figure-eight pattern or decreasing the distance between the weaving cones.

Walking in sand

- Walking in sand is more difficult than it appears and should be begun slowly.
- The softer the sand, the more difficult it will be for the dog to walk. So start this activity in hard-packed sand, if possible, and begin with two to three minute walks with the dog on leash.
- To increase the intensity of the exercise, walk the dog for longer distances, up and down embankments, and in zigzags.

Using a rocker board

- Purchase a rocker board or build your own using a sturdy piece of plywood covered with a non-slip surface and mounted on a semicircular base. A BOSU Balance Trainer (an exercise ball that’s been cut in half with a platform on the top), for example, can be used as the base for your rocker board. For large dogs, the rocker board needs to be at least 8” longer than your dog and twice his width. A Buja board may be used for small dogs.
- Place the dog on the board and rock him from side to side, and from front to back, until the dog tires.
- The dog may sit, stand, or lie down on the board.
- Place the dog’s forelimbs on the ground while the hind limbs remain on the rocker board as the board is rocked from side to side, and from front to back, until the dog tires.

Walking in water

- Walking in water can be done in a natural body of water that has a relatively level bottom or on an underwater treadmill.
- Walking in water is fairly strenuous for the dog, so gradually increase the time to allow the dog to build up his endurance.
- Dogs that are just beginning to walk in water may start at a higher height. The higher the level of water, the less stress on the dog’s body:
  - Water at hock level: dog is using 91% of body weight
  - Water at knee level: dog is using 83% of body weight
  - Water at hip level: dog is using 38% of body weight
- Water height may be varied to increase the intensity.
Leaning on an incline

- For this exercise you can use a hill, a board or ramp placed on a bench or cinderblock, a stair, a contact trainer, and so on.
- Position the dog’s back legs on the incline at approximately 15° to 20° to start.
- Use a treat or a hand signal to encourage the dog to lean forward and back.
- Repeat this exercise five times; it may be done in sets of three.
- Be cautious if the dog has any acute or new back issues because the incline may aggravate his back.

Correct tugging: the dog’s neck is in a neutral position.

Incorrect tugging: the dog’s neck should not be in an extended position.

Tugging

- Encourage the dog to tug on a rope or toy with his neck in a neutral position. The neck should never be in an extended position.
- Engage in tugging for short sessions at first and gradually increase the time.
- Do not yank the dog back and forth; provide consistent tension for the dog to tug against.

Finally, a video that gives you the tools to improve your skills as a handler, regardless of the size of your backyard!

Success with One Jump gives clear instruction on more than 20 exercises to help improve your dog’s understanding of the key handling maneuvers in agility, from a simple front cross to a more complex pull-through to distance skills. This video is a must-have for the seasoned competitor and novice handler alike.
**Controlled sit to stand**

- This exercise is equivalent to our performing squats without any weight.
- Back the dog into a corner or up against a wall to avoid excess movement.
- Use treats to encourage the dog to repetitively sit and stand for sets of eight to ten, done two to three times.
- Also encourage a full stand from a sit.

**To Increase Strength in the Gluteal and Hamstring Regions**

The hamstrings and gluteal regions are located in the back of the dog’s hind limb. The hamstrings are the larger muscles and the gluteals are located more on the dog’s pelvis. Together, these muscles are responsible for extending the dog’s hip and knee. They also produce power for jumping and running. These muscles should be strengthened on a regular basis and be involved in any cross training regime for agility dogs.

Exercises to increase strength in the gluteal and hamstring regions are appropriate for:

- Improving jumping strength
- Improving power in the hind limbs
- Recovery from hind-limb injuries, especially cruciate injuries
- Recovery from back injury
- Generalized hind-limb weakness

Next month we’ll discuss exercises to strengthen the quadriceps region and the forelimbs, and to increase core and back strength.

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**Walking up hills**

- The hills should ideally be at a 30° to 45° incline.
- Walk the dog up the hills for a distance of 50’ to 100’, to be repeated three to four times initially.
- Walking encourages equal use of both hind limbs—do not allow the dog to jog or trot.
- Zigzag the dog down the hill to avoid stress on the forelimbs.

**Rocking on a Theraball**

- Follow previous instructions for this exercise in the “To Increase Hind-End Awareness” section.

- Pick up the dog’s forelimbs and encourage him to walk backward. Holding the dog’s forelimbs stabilizes the pelvis.
- Do not encourage the dog to do this exercise without help or to walk back on his own.
- Start with a distance of approximately 10’. Give the dog a short rest and then repeat the exercise three to five times.
- As the dog becomes stronger, you can increase the distance and repetitions. This may also be performed going up small inclines of 10° to 20°.
Wendy S. Linton, PhD

Strengthening the Performance Dog
By Debbie Gross Saunders

Dogs participating in performance sports such as agility require crosstraining activities, including both a conditioning program and strengthening exercises. Doing a variety of strengthening exercises will improve your dog’s agility performance and, even more important, will protect him against injuries. This video demonstrates a variety of strengthening exercises that should be part of your crosstraining program outside of agility. It includes exercises to improve jumping strength and power, improve collection and turning ability, increase forelimb and hind limb strength, improve balance, and increase hind-end awareness.

Would you like to improve your dog’s agility performance while helping to prevent injuries?

Strengthening the Performance Dog
By Debbie Gross Saunders

Dogs doing agility and other performance canine sports need to be treated as athletes. Strength and flexibility are vital. Stretching prepares the body for movement, improving performance on the agility field and aiding in the prevention of common injuries. Learn how to properly stretch your dog. This DVD contains instructions for stretching each part of your dog’s body so that you can create a stretching routine to address injuries or weaknesses in your dog. It also contains a complete pre-agility stretching routine that you can use if you want a set routine to follow.

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