

Lumbosacral Tuck/Lift:

-Standing to the side of the horse, apply pressure and run your fingers down both sides of the rump several inches off midline. Begin mid rump and then extend down into the muscular grooves on either side of the tail head. You can alternatively use a pen or another thin/blunt object if your horse does not respond to your fingers. Your horse should respond the same way as he does to belly lifts by lifting his back and flexing his spine. Hold the exercise for about five seconds then release.

If you would like to see pictures of the exercises described above, then follow the link below to an excellent resource provided by the University of Tennessee.

https://vetmed.tennessee.edu/vmc/EquineHospital/Documents/EPR/UTCVM_LACS-EquineCarrotStretches.pdf

I hope you will enjoy horse yoga as much as I do. If you have any questions, feel free to contact me at intern@newenglandequine.com

Christina Cassano, DVM, cVMA

When a horse's multifidi muscles become weak, they compensate by tensing and contracting the longissimus and iliocostalis muscles which leads to muscle stiffness, pain, and the common complaints of a horse not being able to collect and/or bend under saddle.

Now let's get back to the exciting part: horse yoga. You will need a lot of carrots cut into small pieces or some of your horse's favorite treats. I recommend positioning your horse against a wall to prevent them from cheating the exercises. With all exercises, you will begin gradually in stretch magnitude, time, and repetition. You will have to use your judgment for the magnitude of the stretch based on your horse's flexibility and ability to stretch. Each stretch can be held for several seconds with three to five repetitions once per a day to start. Allow the muscles to relax for several seconds in between each repetition. You can then use your judgement to increase the number of repetitions and length of time that the stretch is held. Ideally when doing lateral stretches your horse's head should be held perpendicular to the ground if possible.

Dynamic Mobilization Exercises:

Rounding Exercises: recruits abdominal, neck, back, pelvic, and hind limb muscles; flexes intervertebral joints

-Guiding your horse with bait (carrot or treats), have him round his neck to the level of his chest. Hold him here for several seconds then release. It's as simple as that. To make the exercise harder, you can then guide your horse's head to the level of his knees (carpi) and to the level of his fetlocks. Some horses will be able to thread their head through their front legs and at the level of the knees and fetlocks.

Lateral Bending Exercises: recruits abdominal, neck, back, pelvic, and hind limb muscles; produces rotation of the intervertebral joints

-Similar to the rounding exercise, you will guide your horse with bait and then ask him to bend his head and neck around to his side body. Here is where standing against a wall on the off-side becomes very helpful. You can begin by asking him to bend to the point of the shoulder and then make the exercise progressively more difficult by bending to the level of the girth, the flank, the stifle, and finally the hind fetlock.

Specific Core Strengthening Exercises:

Belly Lifts:

-Using your fingers, a blunt tool, or a curry comb, apply pressure in a scratching motion to the abdomen at the level of the girth. Some horses will not respond to this but if they do respond you will see your horse lift and straighten out his back, producing dorsal flexion. Maintain this raised position for about five seconds by continuing with the scratching motion.

Equine Core and Back Musculature Training

Dr. Christina Cassano

One of my mentors at Colorado State University regularly recommended the practice of yoga to her equine patients. This immediately invoked laughs and strange looks from clients and always made me envision horses contorted into yoga poses that would be anatomically prohibited in real life. Go check out the Horse Yoga 2020 calendar to see what I mean. As crazy as my mentor sounded, she was right; horses do need to do their own form of yoga. Since you are likely raising your eyebrows at me now, let me explain what I mean.

Myself, and my mentor, are using the term yoga to describe exercises that strengthen and provide stability to the equine core and back musculature. As riders, we sometimes forget that we are sitting directly on a horse's spine and since our weight is focused onto a small area, a large amount of force is applied to our horse's back. This in turn, without a doubt, leads to back soreness and pain that decreases a horse's ability to perform to the level that we require of them. Luckily, we can help our horses do their yoga, which in turn can help to alleviate this discomfort and pain.

In the article, *Core Training and Rehabilitation in Horses*, Hilary Clayton, BVMS, PhD, MRCVS, provides excellent insight and information pertaining to this concept. She describes that our saddles sit directly on the thoracolumbar spine which is a weak point in the equine back because it is already pulled down by the very heavy abdominal organs. When a rider is seated on the horse, the rider's weight and the weight of the saddle is concentrated directly onto this weak point resulting in further extension of the intervertebral joints and compression of the dorsal spinous processes. This can lead to generalized back pain and impingement of the dorsal spinous processes. Exercises that train the core and back musculature can help to improve good posture and stabilize the spine. This subsequently helps to prevent extension of the intervertebral joints and compression of the dorsal spinous processes.

The equine core, just like the human core, consists of four muscles. The rectus abdominus and the external abdominal oblique muscles, which are more superficial, provide dorsoventral flexion and lateral bending of the back and spine. The internal abdominal oblique and transverse abdominal muscles, which are deeper, provide stability to the spine among other functions. The back muscles we will focus on are the longissimus muscle, the iliocostalis muscle, and the multifidi muscle. The longissimus muscle and the iliocostalis muscle are very long muscles that act to extend and laterally flex the spine. The multifidi muscle, which is deep to the muscles described above, sits directly on the dorsal aspect of the vertebral bodies and consists of many small muscles that provide direct stabilization to the spine. Injury to the back rapidly leads to atrophy of the multifidi muscle and subsequent spinal instability which can then lead to pain, poor performance, and the development of pathologies such as osteoarthritis.