

A Rider Training Scale

Beth Glosten, MD

drawn figures by Sandy Johnson

The dressage community has codified a training scale for our horses: Rhythm, Relaxation, Contact, Impulsion, Straightness, and Collection. The scale is used to set training priorities and goals. My focus has been rider function, or teaching riders of all levels how to use their bodies on horseback in ways that are healthy and effective. I suggest this Rider Training Scale to outline skills important for the development of the rider. This scale can be used to organize the rider's personal goals separate from the horse's training. It can also be an on-the-fly checklist to help sort out how the rider may be contributing to a training problem. The items on the Rider Training Scale are all closely related and can develop at the same time. For example, the novice rider can master all elements at the walk, and the advanced rider can refer to the scale while training upper level movements.

The Rider Training Scale includes:

1. Mental Focus - the rider considers every step of the ride
2. Body Awareness - the rider knows where the correct position is at all times
3. Support of body position - the rider maintains a good position in all gaits and movements
4. Body Control – the rider has control of the arms and legs allowing independent aids that do not upset the rider's balance and position
5. Understanding how the horse moves – the rider moves with the horse, not against it
6. Directing the horse efficiently – the rider uses all skills to accomplish transitions and movements

Mental Focus

A productive training ride requires complete focus from the rider. This is not always an easy state of mind. Work stresses, family needs, and other responsibilities can conspire to divide attention and leave you thinking about many things during your ride. This lack of focus can be perceived by the horse as lack of clear leadership. You owe it to your horse to find a way to quiet the chatter in your head when you settle in the saddle and commit all energy to your equine partner. From this place you can fill the role of a clear guide that assesses and influences every step of the ride.

A productive mindset will help you solve problems. Training difficulties can become simpler if you are keenly focused on what is happening. Conversely, without your complete attention, it is very difficult to sort out a training issue. On those days when it is clear to you that you are unable to be a good trainer for your horse, either reduce expectations, or go for a trail ride!

Body Awareness

Proper posture puts you in the most effective riding position. Good posture is the proper alignment of the vertebrae of the spine. Figure 1 shows that the spine is a series of stacked bones or vertebrae. These bones are not stacked in a straight line, but form

curves at the neck, or cervical spine, the mid-back or thoracic spine, and at the low back, or lumbar spine. This proper alignment is called “neutral spine alignment.”

Neutral spine alignment puts you in the most efficient riding position. This position promotes your postural muscles to stabilize your balance and allow free and supple movement in the shoulder and hip joints. Understanding where neutral spine alignment is in your body, and knowing what (Figure 2) it feels like while riding can be challenging and takes some practice. First understand what it feels like off the horse, and then, with mirrors or feedback from someone on the ground, learn what it feels like on the horse. Many rider position problems stem from improper posture causing compensatory tightness and gripping in the shoulders and legs. Further, it is easy for this position to be lost (Figures 3 and 4) as you struggle with a challenging riding exercise or movement. But, loss of this position can in fact contribute to the difficulties.

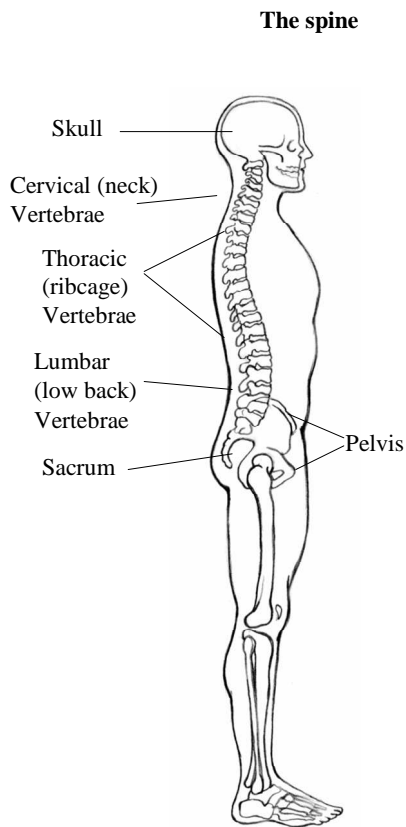


Figure 1. Alignment of the vertebrae in the spine. Proper posture allows for curves in the spine.

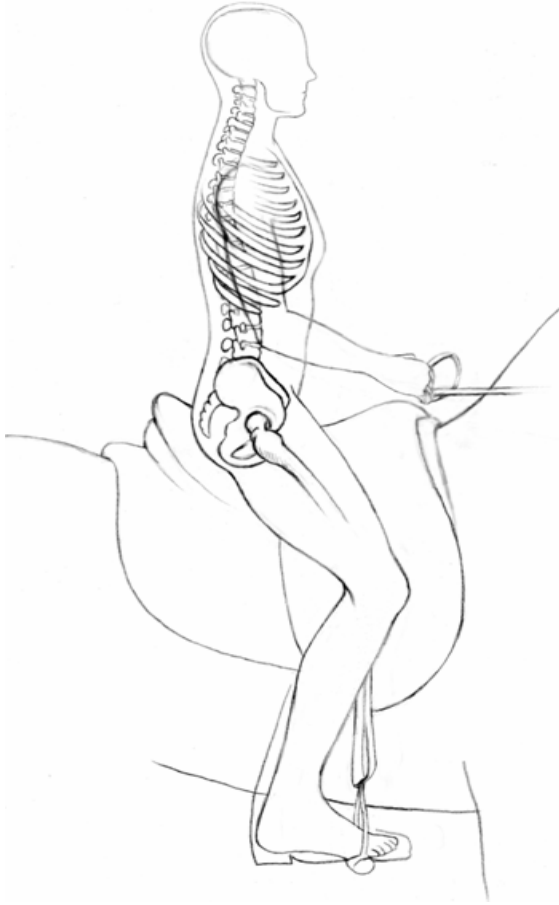


Figure 2. Neutral spine alignment in the saddle. Note that the seat bones point down, the normal curves of the spine are present, and the shoulders and ribcage are balanced over the pelvis.

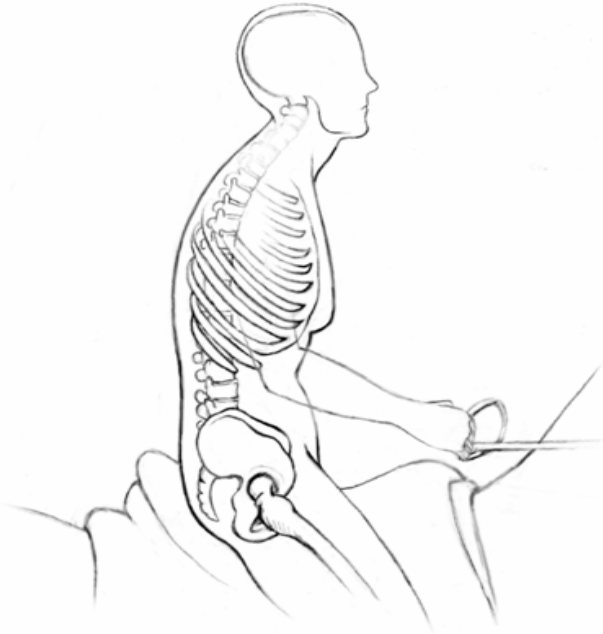


Figure 3. A flexed, or rounded spine. Note that the lumbar curve is lost, the seat bones are pointed forward rather than down, the rider is relatively short in front, and the shoulders are rounded forward.

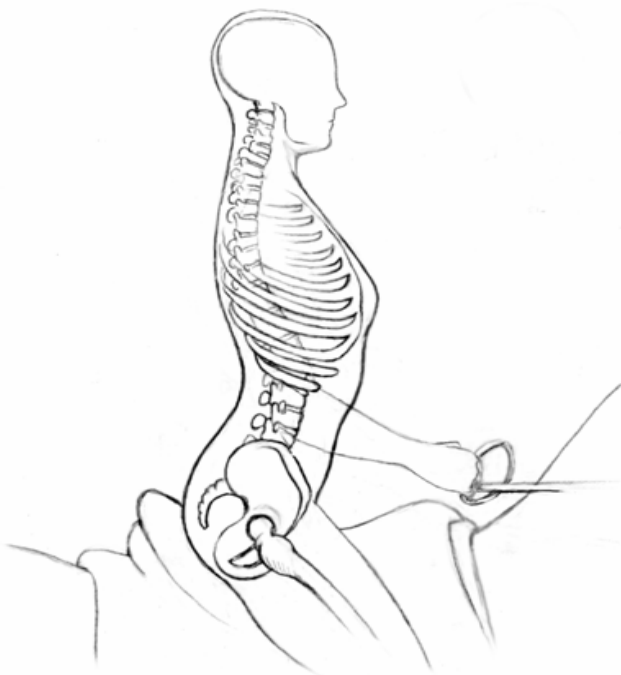


Figure 4. An arched or extended spine posture. Note that the seat bones point back, the lumbar curve is exaggerated, and the front of the rider's body is relatively long.

Support of body position

A rider able to support proper body position on a moving horse stays balanced, looks graceful and elegant, and can stay with the horse to influence its movement in a positive way.

Key to supporting good posture is continuously utilizing the deep postural muscles of the torso. These muscles are designed to support our upright posture throughout our daily activities and they do so quite efficiently. The muscles include the deepest muscles layers of the abdominal wall (transversus abdominis and internal oblique) and the deep muscles of the back. These muscles create essentially an elastic corset around your midsection. The transversus abdominis, whose muscle fibers run transversely across the torso, when activated, pulls the abdominal wall in, and flattens the tummy. The internal oblique and deep muscles of the back can move the spine in all directions as well as stabilize the spine in neutral alignment. A rider with awareness and strength in these muscles of the torso is able to stay in good posture and balance on the moving horse, and, use of an arm or leg aid does not disrupt this position. Truly independent aids are then possible.

Many riders use their postural muscles asymmetrically. Some riders tend to adopt a “C” shaped posture (Figure 3). This rider needs activation of the muscles of the back to pull the body in a more upright position. Also beneficial is stretching the muscles of the shoulder girdle. It is not uncommon that a rider, in an effort to “sit up straight with shoulders back”, develops too much tone in the muscles of the mid- and upper back and pulls the spine into an arch (Figure 4). This tension can spread to the arms and limit suppleness of the shoulder compromising contact with the horse through the bridle. Connecting to and using the abdominal muscles, in an inward fashion to pull the ribcage slightly closer to the pelvis, helps balance this muscle use.

Imbalance in these postural muscles can also interfere with side-to-side, or lateral symmetry. No one is perfectly symmetric, and most riders have a tendency to be stronger on one side. When the muscles on one side of the trunk are strong compared to the other, the strong side tends to be shorter, and the pelvis and thigh bone pulled up off the saddle on the strong side. This shifts the rider’s weight onto the seat bone of the weaker, longer side. There is also a slight spine rotation towards the stronger, shorter side. This rider imbalance can significantly affect the horse’s balance and compromise bending and straightness. It is best addressed by accessing and strengthening the longer, weaker side of the rider’s torso. This allows the short, strong side to let go and the rider to sit in the middle of the saddle.

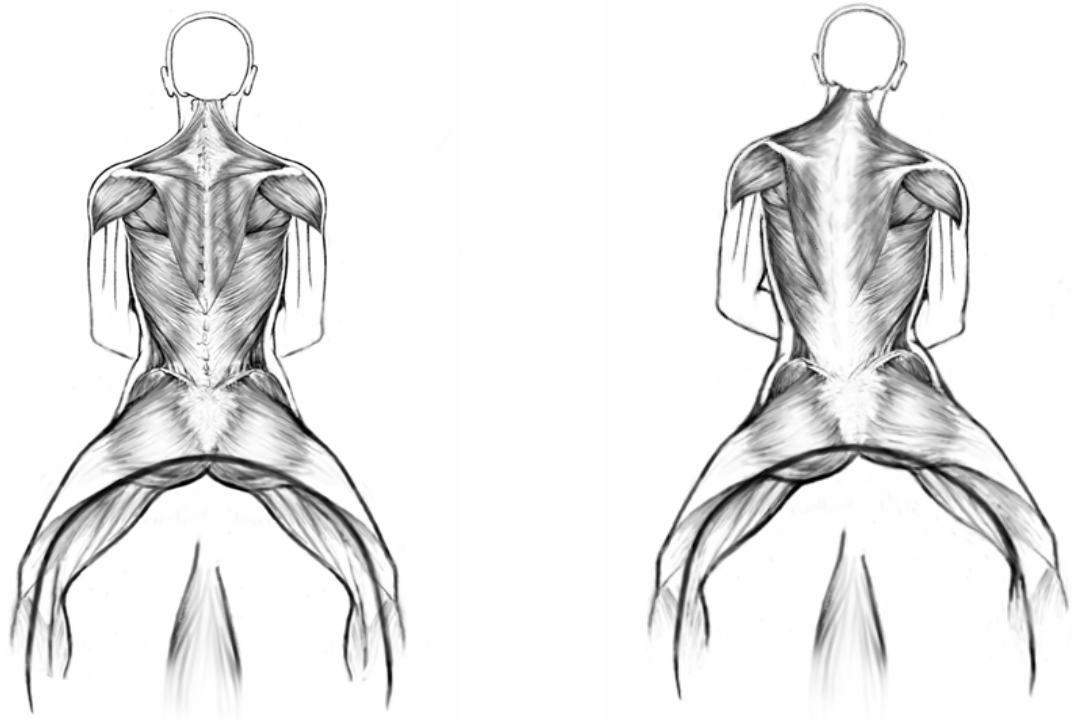


Figure 5. The rider on the left has good lateral balance. The rider on the right shows the right side to be shortened, the weight is shifted to the left, and the right shoulder is low, the left shoulder is high. This is often accompanied by a pulling up and in of the muscles of the right hip joint, and losing the stirrup on this short side.

It is common, especially in the novice rider, that balance strategies other than the torso muscles are used. The legs may grip in and up against the saddle or the rider may seek balance from the reins. These strategies preclude staying with the horse's movement and applying clear aids.

Body Control

Effective riding requires that the rider has complete command of the legs and arms. This can only happen when the legs and arms are not participating in maintaining the rider's balance.

Large and strong muscles connect the leg to the pelvis at the hip joint. Awareness and control of these muscles is vital to allow the rider to move with the horse's body. Tightness and excess gripping of the muscles of the upper leg will preclude movement at the hip joint and lock the rider's body against the movement of the horse. This gripping will also force excessive and unhealthy movement of the spine. Further, if the legs are gripping for balance, it is hard to give a clear aid to the horse. Ideally, the leg hangs down from the rider in a very slight external rotation, or turned out position, that puts the thigh against the saddle and the calf against the horse's barrel. Feel the leg reach down away from your balanced torso and in a sense, become part of the horse's body.

The leg comprises a substantial portion of any rider's body weight. As such movement of the leg to apply an aid can disrupt rider position and balance. If this happens, it is difficult for the horse to understand the cue. Trunk muscle support prevents this problem. Pay attention to stability of the torso while applying leg aids.

For most of us much of our day involves thinking, talking, typing and sitting. That is, running our lives from the shoulders up! This sense must be put aside when on horseback, otherwise we'll tend to ride from what we see, rather than what we feel, and make corrections with the hands via the reins rather than with the whole body. We need to ride from our movement processing center, or center of the body, rather than our thought processing center, or brain. We may also tend to initiate movement and balance from the upper body and shoulders, rather than the center of the body. This is inefficient and can lead to shoulder and neck stiffness and soreness.

The arms connect to the torso at the shoulder joint. This complex group of muscles allows a great range of motion at the shoulder. However, these muscles can disrupt posture. Excess tightness of the pectoralis major muscle in the front of the arm pit can pull the shoulders forward and the spine into a rounded posture (Figure 3). Too much emphasis on "keeping the shoulders" back can lead to an arched spine (Figure 4). Ideally, your arm hangs straight down from the shoulder joint with a soft bend in the elbow and suitable grip on the reins through your hand to create a steady but elastic connection to the horse's mouth. The arms must feel like they are more a part of the bridle than your body. This can happen only if you are centered with stable balance from the torso. And like the leg, application of a rein aid must not cause a change your posture or balance.

Understanding how the horse moves

Understanding the character of each of the horse's gaits and how the rider's body moves with each step of the gait is necessary for the rider to predict and positively influence the movement of the horse. A pro-active mind and body-set allows precise sensing of deviations of the horse from the desired character of a gait or transition and puts the rider in a position to guide the horse.

Walk. The walk is a 4-beat gait. This rhythm must march in the rider's head and body. Set in your mind a metronome of the desired tempo. In this way, you quickly pick up variations in energy and can either steady your horse, or urge him on.

As the alternate hind legs step under its body, the horse's ribcage swings over and the back lifts up on the opposite side. This causes a slight side-to-side rocking of the horse's back, right where the rider sits. Your body should "walk" with the horse by feeling this motion of the horse's back and allowing movement at your hip joint to follow the back. There is also a small amount of movement in your pelvis. By feeling the side-to-side swing of the horse's ribcage, you can identify which hind leg is stepping forward and in the air. If the rider does not move at the hip joint and takes all the walk movement in their spine, there can be too much rocking of the whole body either forward and back, or side-to-side. Also be careful to avoid pumping with the gluteal (butt) muscles). I call this "wishful thinking" walking! Don't work for the horse! The horse must walk, and you stay balanced and rhythmic over him.

The neck and head of the horse undulates in and out at the walk; as such your arms must move at the elbow and shoulder joints to keep an elastic contact. The amount

of movement will depend upon the horse and the character of the walk, but your arms must allow this movement.

Trot. The trot, with its increased energy, can challenge the rider's balance. By understanding the gait and knowing what to expect, the rider can prepare for the increased movement. The trot is a 2-beat gait with a moment of suspension between each beat. Just as in the walk, the rider should seek the desired tempo for the horse's trot and keep the body in that tempo. This takes body control and stability to remain steady in the energetic trot despite attempts from the horse to be variable.

The sitting trot is the gait most likely to trigger balance strategies in the rider that are detrimental, such as gripping with the thighs and tightening the shoulders. Four strategies can help you master the sitting trot: first, don't fight the bounce – it only causes more gripping; two – keep proper posture and alignment and maintain self-carriage going forward in space with the horse; third – feel the abdominal muscles pull in to anchor the center of the pelvis to back of the saddle, like a seat belt; and fourth – feel the rhythm and side-to-side swing of the horse's ribcage and back. Allow movement at your hip joint to stay with this swing of the horse's back. It is much harder to do at the sitting trot compared to the walk as the tempo is much quicker and it is so tempting to grip. But by tuning into the swing of the horse's back you are allowing movement where it is productive, in your hip joints. You will move with your horse, and not brace against him. Communication with the horse improves, and the horse's trot improves.

Unlike the walk, the horse's head and neck carriage is fairly stable at the trot. As such, your hands need to stay still. This can be challenging as your body is managing much more energy. A common problem is the rider's arms and hands "posting" up and down with the rider's body or bouncing with the sitting trot. The trot requires the rider to connect the hands and arms to the horse and bridle and move the body independently from the arms.

Canter The canter is a 3-beat gait with a moment of suspension. Unlike the walk and trot in which the hind legs move in opposition to each other, in the canter the hind legs move almost together during the first two beats of the gait. This results in an undulating, or rolling path of energy through the horse's back from the outside hindleg to the inside foreleg. This movement of the horse can encourage front to back movement of the rider's body. Some is OK, but it can become exaggerated. The rider should feel upright and stable moving up and down with the horse's body, in the rhythm of the gait, encouraging the swing of the horse's hindlegs under the body. Like the walk, the horse's neck moves during the canter stride. The rider must be supple at the shoulder and elbow to stay with the movement of the horse's head and neck.

Directing the horse efficiently

In the end, good riding becomes energy management of the horse. From understanding the character of each gait, the rider can anticipate the nature of the horse's energy to be managed. It is the rider's challenge to use the skills of focus, and body awareness, support, and control to not be put off balance by this energy but channel it in the desired way (forward, sideways, transitions, etc). The bulk of this energy management occurs in the rider's trunk or torso (Figure 6), with support from the rein and leg aids.

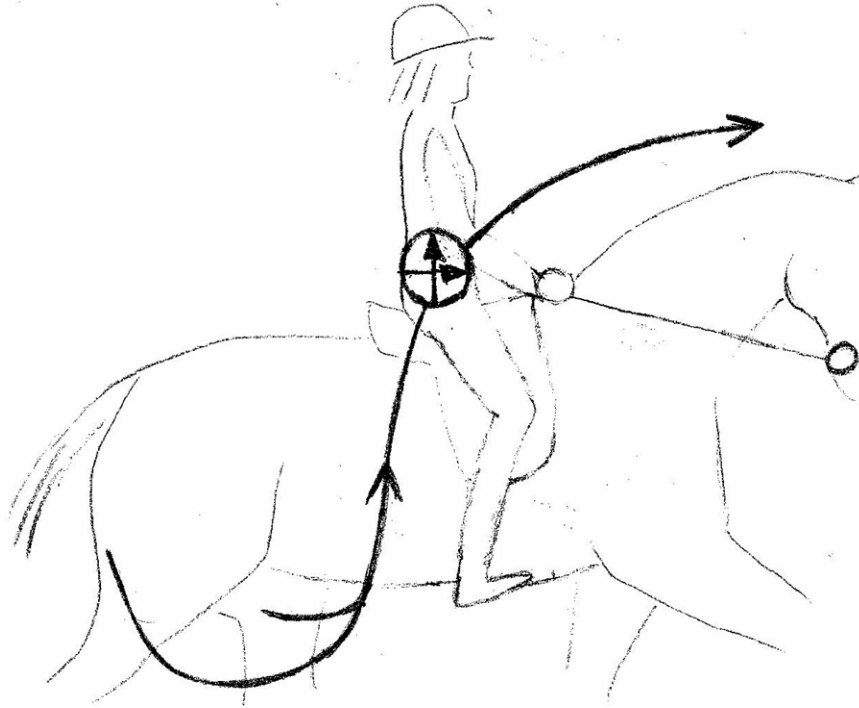


Figure 6. Riding is energy management. Think of the horse's energy coming from the hindquarters and being managed by the torso of the rider, with support from the rein and leg aids.

To ride a balanced down transition, the rider must anticipate the reduced forward energy of the horse and not be thrown off balance. Further, the rider must anticipate the rhythm of the gait after the transition and be prepared for and encourage the rhythm of that gait both from the mental metronome and the expected movement of the body.

To ride a balanced up transition, the rider must anticipate the increased forward energy and not be left behind. The rider must have a proactive mindset and a “come with me” attitude to encourage the increased energy from the horse. The leg aids provide the final cues for the up transitions but the rider must be in self carriage, ready to move in the rhythm of the new gait.

Within gait transitions come from maintaining a steady tempo (from understanding the horse's gait and the mental metronome) and modulating the amount of forward versus upward energy. The rider's body directs the energy up for collection and out for medium or extended gaits.

This Rider Training Scale was developed to emphasize healthy riding mechanics. Without these skills, communication with the horse with light aids is difficult and that wonderful state of harmony is elusive. We owe it to our horses to always be asking if our position and balance strategies are either causing or contributing to a training problem. Every step we should be asking “Where am I; where is my body; am I balanced?” After all, we are the cognitive member of the horse/rider pair, equipped with the analytical capabilities to solve problems. Be sure to include yourself as potentially a part of a training problem and use the Rider Training Scale as one tool for resolution.