What the Topline says about Horse and Rider

Horses can really benefit from this gentle check of the poll and atlas. How the muscles feel, how the horse reacts tells us much about the tension and soreness their bodies and minds hold.

By Manolo Mendez

Specialist of In-hand and Classical Equitation with writer Caroline Larrouilh







1 One hand on the poll, the other on his nose. Exploring fingers. What do you feel? Is your horse tight or soft, is he sighing quietly or trying to escape your hands?

2 Right hand checking the poll, left hand cupping the atlas. Note Dinamico's quiet eye and listening ear.

3 Checking the masseter area or cheek (see right hand). This muscle should feel soft and full, not hollow or rigid. He should enjoy the feeling of your hand on his face.

As I point out frequently in my lessons, a horse should not be trained as though its body is divided into three different and unrelated segments. Unfortunately for horses, I see too many riders who focus on riding either the neck, back or the hind legs instead of riding the whole horse. This results in stiff and blocked horses who are leg movers instead of back movers and in time may develop mild to career ending soft tissue or skeleton problems such as early arthritic changes in major joints including the TMJ, poll, withers, neck, sacrum, stifles, and hocks; restrictions and muscles tears in the biceps, pectorals, ribcage, long back muscles, loin, croup, and hamstrings along with suspensory and tendon problems. These are often accompanied by behavioral problems such as refusing to go forward, bolting and/or rearing as well as shutting down or being aggressive and/or developing stable vices.

While I do not believe in training with a focus on developing any one part of the horse's body, the body does have a lot to say about how it is ridden and treated if we take the time to look at it, touch it, and feel it.

With every new horse I meet, I spend the time to observe its body while it is standing and while it is moving. Just by looking at it, I can already learn a lot about how it feels inside as an individual, how it will move, and the reasons why it will not be able to bend well or extend or collect. Its muscles patterns, how it stands, and how it organizes its posture and balance will give me the keys to how I must work with him/her.

The riders often asks me how I know so much about their horse before they have even started talking and explaining what their challenges are. I explain to them that if we are willing to take the time to observe and study our horses, we can all draw this knowledge from how the topline and underline are shaped, how the coat feels, how the hair patterns are organized, whether the muscles are plump and full where they are supposed to be, or concave and tight. I show them where muscles that should be small are big and inflamed instead and how there are pronounced or mild asymmetries between one side of the body and the other. In short, I show them how the horse's body is a map and every detail on the map is a clue as to how the horse has been trained.

In the following paragraphs, I will list some of the things I look at, and

explain what I look for and what I consider good and what is not. I will review the horse's topline and underline. By topline, I mean all the muscles and skeleton parts that are above the spine - and include the hamstrings and the abdominal wall muscles because in my way of seeing the horse, the topline is one long chain of muscles woven into one another that starts right behind the ear of the horse and travels down its neck, over its withers, back and croup, and down to the point of its hocks. I include the underline because it is impossible to look at how the topline functions without also looking at the base of the neck, the muscles that go from the head to the shoulder, the chest and pectoral muscles, the abdominal muscles, and the psoas muscles. You see, a horse really is a whole and even for this article, looking at it in parts is proving impossible.

After I have observed the horse, I like to have the rider ride him for me a little, but my analysis is more thorough if the horse is brought to me in a halter without a saddle and bridle. Then, not only can I look at and touch him, but I can confirm my impression by testing his elasticity, looseness, flexibility, and suppleness by asking him to do very simple movements. This also gives me an understanding of how he feels inside his body.

For example, when I look at the horse's face, poll, and neck, I look at his/her expression, whether it is afraid or content, whether it is tuning me out or curious, or whether it is angry and impatient. I look at the wrinkles of its nose and the tightness or relaxation of its mouth. I look at where the noseband would lie and if the flesh is marked there or if the hair is discolored or rough under my fingers. I touch the horse's cheeks, and I feel whether they are fleshy or dry and flat. I lift the forelock, and I look at the two small round muscles horses have on their forehead just above where they sometimes carry a star. Are these muscles even? If not then I will ask the owner if this horse has had a tooth problem, or I will wait to see the ride, and I may notice a rider that is holding on to one side of the mouth and causing the horse to chew or resist more on one side of its body. I will be likely to find that this horse has contracted and dry muscles on that side of its body, maybe even strides shorter and finds it difficult to bend in the opposite direction. Or I may find that a horse is so unbalanced that he divides his body to use his neck as a balancing rod, causing his neck to flex to the outside and his body to flex to the inside. These patterns will need to be gently unraveled and the horse's posture gently restored. Trying to force a good posture on a horse that has held himself incorrectly for a long time can be a disaster; we must proceed slowly and without force.

In hand, I will gently swivel the horse's head in a "no" motion or have him nod "yes" to check whether his poll has muscles or spine restrictions, then I like to ask the horse to reach with his neck forward, down, and out. Sometimes, I will meet a horse that cannot stretch his neck with an open throat latch anymore, the hinges of the poll and the span of his withers have been frozen in place by training that insists on curling the head and neck and placing the nose well behind the vertical.

The owner will complain that the horse cannot sit. It won't be able to shorten its body because it cannot lengthen through the topline anymore and therefore cannot equally bend all the joints of its hind legs deeply enough to lower the croup and allow the front end to lighten and rise. Why? Because its neck has been shortened and is be so tight it cannot accommodate the arc that collection demands of the entire body.

As the horse moves up the levels, if the horse is trained properly it will look as though the rider has more and more horse in front of him than

FEATURED IN THIS ARTICLE
DINAMICO XII

Imported Andalusian Stallion
Sire:Salinero XV by Enojado II
Dam: Dinamica IX by Celesto
• 2000 • Grey • 16.2HH •


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4 I am checking for tightness in the masseter/ cheek area, touching and gliding down these muscles, and Dinamico responds without any concern and a relaxed mouth.

5 Asking for a gentle flexion of Dinamico's jaw to the right without meeting any resistance.

6 I flex him at the poll both left and right, gently guiding his head and holding his jowl and nose. This tests the mobility through the poll. I pay attention to any differences in range of motion to the left and to the right.







7 Dinamico shows that he is able to flex through the poll and jaw with a loose and relaxed lower jaw. He holds no tension in his TMJ.

8 I continue the flexion and note Dinamico is able to flex without shifting his body weight to counter balance. I assess his flexibility and balance. Flexion should be soft and fluid without tension or resistance.

9 I ask Dinamico to lower and extend his neck and head. I check his overall balance and muscular state. He is softly balanced.

behind him because the backend joints will fold deeply in collection and the horse's neck will rise before the saddle. Today we see many Grand Prix horses that look very short in front of the saddle and quite long behind it. That is not correct training.

I look to see if the muscles on both sides of the neck, one hand behind the ears are even, if they are bulgy and hard, or stringy and dry. I check to see if they are hot, cold, if the horse flinches or ignores me, or on the contrary welcomes my touch with a sigh of release. I check to see if the neck is wider at the base and thinner as it goes toward the poll or if instead the "patting" places on both sides of the neck are hollowed in and the neck is thin at its base and wider at its apex, behind the ears. If that is the case, I know this horse has been ridden without being allowed its own balance, it has been ridden in a rigid and containing frame and more often a backward hand action. Its rider will complain that it is uncooperative and hard in the mouth. It will be stiff in the body because these muscles are those that develop when a horse is bracing at the poll or has had its mouth clamped down and is ridden consistently broken between the second and third vertebra with its jaw bone aiming towards its under neck and its nose behind the vertical. When I touch the long muscles that run from head to shoulder on the side of the neck and those from the head to the chest, I may often find that they are painful and sometimes the horse will look ewe necked because these muscles are overly developed in comparison to an under developed and weakened topline.

In general, if I encounter a horse that has overdeveloped muscles on the underside of the neck and thin, stringy, dry muscles on top, I know that this horse will have balance problems because it won't have been allowed to seek and establish its independent balance and step into, and carry the bit, and it will not be able to collect. It will be as though the energy travels through its body and stops at the withers, never traveling through its neck. This horse may also have hollow spaces behind its shoulders instead of an elastic apron of muscles that link the shoulder to the back and hind end.

Often these horses look odd because they have large bodies and either pencil necks or short and very thick necks, weak looking or hollow backs, hunters bump with under developed hindquarters and croups with ski slope angles rather than round and elastic muscles. As there has been no effort to develop the horse's elasticity horizontally, if this started as a conformation issue, it soon becomes worse through training that makes the body tighter instead of looser and freer with every training session.

I can see this reflected in the muscles of the back. The ones that run from wither to croup and line the spine on both sides. If I see a horse with the spine protruding and sharp inclines down to the ribcage with muscles that are so flat I can barely see them, and when I touch them are hard as wood, I know this horse is being restricted in its movement and I will want to check the saddle and the riding. Such muscles, whether found on the back or elsewhere in the body tell me that the horse is not ridden elastically, that the rider does not know that muscles need to contract and release rhythmically to develop into wellness. Muscles can contract, but they cannot lengthen themselves on their own and so the topline can only lengthen when the underline shortens and vice versa. If a rider keeps their horse's head and neck pulled in and kicks the hind leg under to try and bring the back up and muscle the topline, all they will do is train the horse into a leg mover instead of what is desirable: a back mover. Back muscles develop properly when we ride the whole horse in a good posture in the right rhythm, it is all they require.

Over rounding the horse is the kind of posture that destroys the elasticity

in the topline as any fixed and hyper flexed position will - I used a bow and string analogy in previous articles to explain why. If you keep a wood bow strung all the time, soon enough it won't send your arrows far because its body will have set into that curve. By loosening the string of the bow after each session, the body of the bow retains its flexibility and it will shoot arrows much further because the archer will be able to bend it further and charge the string and arrow with more energy.

While the analogy is important to explain the importance of flexibility and how much better it accommodates and transforms energy, of course we must remember that a horse is not a bow. An archer can keep its bow strung for hours, but the horse's body needs the release from the pressure of the tightened "string" after being asked for several strides in collection, after an exercise or movement that asked him to gather himself and carry himself more. This is especially more so when you are introducing collection. Horses that are ridden into wellness are those who are encouraged to move elastically, that is with a long neck and a slight arch from poll to point of the hock after being asked for any degree of collection.

A horse will stay content in its work when he trusts that the rider will treat him fairly and ask for a little bit at a time. A content horse is calm and relaxed, its muscles are loose and supple, and its body is ready and willing to take what shape and form the rider asks it to. Before we start looking at the topline and the underline, before we examine the horse's body, we must always remember that the horse is an individual with a mind, a temperament, and a collection of experiences and memories that we need to know and respect. Only when we know our horse in both mind and body can we hope to help develop him for the better by adjusting our training to his particular needs.

As I look at the horse's hindquarters and in particular the croup, I look at where the dock of the tail is placed. Is it lower than the hip points? How does this horse stand? Is he balancing his weight squarely on all four feet, is he parked out and trying to compress his back, are his hind legs way underneath him, in an effort to open his back and de-compress its spine, stretch its muscles? Are both croup cheeks even when I stand behind? If I place one hand on each of his hip points (when he is square) do I find that one is further forward, backward, up or down then the other? When I check the opposite shoulder on that diagonal, what will I find? Will it be less or more developed then its other one?

Finding these landmarks will tell me without the rider needing to open his mouth that the horse is crooked and the gaits are not pure. Only by developing a straight horse can you have pure gaits.

Straightness is an integral goal of every training session. To be straight, both halves of my horse's body must be symmetric, they must be even. Muscles must be developed identically on both sides of the body and have the same tone, elasticity, and strength, because muscles are what keeps the skeleton in alignment.

This is why dressage is called gymnasticizing the horse and is designed to help us ride them into wellness. Designed to build their bodies to become strong and supple so they can live long lives with us. We do not want to ride them into pain and lameness and shorten their useful life and sour their experience with us.



10 I check Dinamico from the back and look for differences in his body mass and bony structures from left to right. I check his spinal alignment and the condition of his back. Sometimes, I will rock Dinamico gently to test his balance and reflexes.



11 One way to remind your horse to travel in a good posture is to ask for a gentle back lift. You can practice this everyday while your horse stands quietly. I like to place my left hand on the croup to feel the muscle's reaction while my right hand asks him to lift his back.



12 Dinamico has lifted his back. His neck stretches forward and his pelvis tucks in a little bit showing good mobility.


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13 As he lifts his back, I check his withers and neck alignment and test the muscle tone and elasticity of his deep cranial pectoral muscle. It should be soft, pliable and allow my hand to sink.

14 I have adjusted Dinamico's posture to show what we **DO NOT WANT TO SEE** because it is is unhealthy for the horse: a dropped back and legs camped out behind.

15 I go over his body testing for soft, pliable, blood filled muscles. No part of his body should feel like concrete. Muscles should be elastic to the touch. The hindquarters are connected to the neck and back. What does your horse feel like?

16 Checking Dinamico's pectoral. I look for restrictions, I compare both pectorals for size and consistency. I check to see if Dinamico is apprehensive or sore.

I pick up the tail. Is it clamped down? Can I move it equally to the left and right or is it stuck a bit in one direction? If I pull gently on it holding it at the base does it feel like it has a solid connection to the rest of the spine, or does it feel weak? Does the horse lower its neck and pull forward, using me as a resistance to stretch its entire spine? Or does it throw its head up, collapses its back and lower its hindquarters, trying to avoid any movement in its back? What clue can I pick up from that?

I gently run my fingers underneath the horse and ask him to raise his back. I allow him and encourage him to lower its neck forward, down and out, and I feel to see how much he is able to arch his topline and where the restrictions are. Sometimes when a rider is on the horse and they do not understand how blocking or curling the neck affects the whole horse, I will ask the horse to bring his back up while they are mounted. I will let them feel for themselves the difference between how much the back is dropped and where it should be. Not by asking for a full blown stretch but just lifting it to where an unrestricted back and ribcage would float up to if the rider had not caged the horse's back in tight incorrectly developed muscles.


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17 I check Dinamico's range of motion in his fore and hindlegs gently looking for restrictions or pain. I compare his flexibility one leg to the other.

Another way I demonstrate this is by placing my bamboo pole on the wither and the croup and asking the horse to raise his back so that the rider can see what the true topline of the horse is as the space between withers and croup fills up.

Being able to visualize the difference between a healthy, strong topline and one that has been pushed down and hollowed by poor training is an effective way to demonstrate to a rider how much training can impact what we sometimes see as a conformation limitation. Seeing this, a rider can make the decision to educate themselves and change their riding for the better.

The topline of the horse receives so much attention because it carries the rider and showcases the arch of the horse's neck, his noble head, the powerful span of its hindquarter and his expressive tail, but we must be careful to learn to read the body of our horses and understand that no matter how flashy and brilliant a horse looks like, a neck broken at C2-C3, a tight back, underdeveloped quarters, the inability to execute movements equally well left and right,







problems with collecting and bending are not born out of thin air and reflect problems in the training that have or will impact the horse's wellness.

Every minute we ride, we are conditioning our horses for the better or for the worse, and we must recognize that their body is like clay, it looks in the end exactly as the potter shaped it.

If the potter is experienced and careful his vases will be even, balanced, and last a very long time, if the potter is inexperienced or in a hurry, the vases he creates will begin lopsided, with thinner walls here and there that will lead to a weakened, inferior product that will crack and break as we use it.

To the eye that takes the time to see it, the body of the horse tells the story of its entire training. The body can show us if draw reins were used, if the horse had inconsistent contact, if he was asked for forward but blocked, or if as a young horse he was ridden with the neck high like an FEI horse without being allowed to fumble and use his neck while finding his independent balance.

The body can also show us if the basic foundations were skipped depriving a promising young horse the chance to become an accomplished athlete. By the same token, the body of the horse also tells us if the training has been progressive and considerate, if the young horse found his independent balance on his own, and if the more demanding work has been tempered with a period of rest. The body tells us if the horse has been worked in tension or if the rider has ensured his horse was calm and attentive.

By looking only at aesthetic things like how curved the neck is, the activity of the legs, or the elegance of the rider we miss or disregard the other cues like a mouth that gapes or foams profusely or eyes that roll and bulge, or restricted breathing. These things are the horses' way of telling us they are stressed. By thinking that a horse drenched in sweat and on the verge of explosion is correct, we minimize and excuse noses behind the vertical, hocks that trail, and horses that show no bend in corners.

We must remember that we seek to develop harmony, and harmony never looks like fear, tension, and explosiveness. A harmoniously developed horse is even and symmetric, with muscles that are long and full, filled with good blood flow and oxygen, his limbs move freely with good scope, and his coat shines naturally and is soft and has a good smell.

When the horse sweats it should be over his entire neck, belly, quarters not just patches on its shoulders or between the horse's thighs, and the sweat itself coats the surface of the muscles like a wet mist. The horse is not drenched from head to toe and left covered with salty streaks and foam. After a workout, the whole body is warm to the touch, and there are no cold zones to indicate that the





18 On the lunge line I look for softness in the atlas and poll area and for a soft, moving gullet. I look or a supple trot telling me Dinamico is working without resistance.

19 I look for correct flexion on the circle.

20 Dinamico is showing **INCORRECT**, crooked flexion on the circle. Note the head is not in the center of the chest.

21 I look for moments of suspension in the canter where Dinamico is clearly using his back and showing softness and self-carriage.

22 An example of what I **DO NOT WANT TO SEE:** Dinamico is using himself incorrectly, the neck carriage is high, the back is hollow and stiff and as a result there is very little movement in the hindlegs.This is not healthy or desirable.

horse was working incorrectly and not using its whole body.

By observing our horse, by touching and feeling him, we come to realize quickly that riding theory is wasted without an understanding of anatomy. Without an understanding of what a healthy horse LOOKS and FEELS like we have no concrete way to measure the quality of our training.

Without an understanding of the horse's body, how can we truly assess and correct his straightness, balance, bend, and impulsion? I find that when a rider is exposed to all the knowledge the body of his horse holds, excluding a momentary upset if the horse is uncomfortable, there is most often a great relief. Now they know the score, now they have a map, now they can begin to ride intelligently and with purpose.

All it requires is the desire to learn.



23 Working in-hand showing correct flexion to the right with the hind legs following the fore while the whole body arches gently.

24 Finally... Dinamico showing correct straightness through the bend. Note how the hind feet follow the fall of the fore feet.



MANOLO MENDEZ was the first Head Rider, and one of six founding members of the Royal Andalusian School of Equestrian Art. Based in Jerez, Spain, the school is one of the four classical schools which also include the Cadre Noir in Saumur, the Spanish Riding School in Vienna and the Portuguese School of Equestrian Art in Lisbon. A master horseman with over forty years of experience spanning classical dressage, doma vaquera and jumping, Manolo is dedicated to a soft, sympathetic and thorough training method which prepares horses physically and psychologically for each stage of training from training to Grand Prix and Haute Ecole. For more information and more articles visit: www.manolomendezdressage.com

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