



Posture Perfect

Sit up straight, don't slouch, shoulders back - we know the importance of good posture for ourselves, but what about our horses? **Could you spot good posture from bad** and how can you improve your horse's posture if it's not quite hitting the mark? Our experts reveal all

SITTING SLUMPED IN an office chair, hunching over a computer, stooping as you stand - ignore position faults at your peril because poor posture can quickly lead to soreness, stiffness and a strain in different areas of the body. But we all know this, right? It's likely that you do and it's possible you've experienced pain or discomfort as a result of poor posture yourself. But what about your horse? What's the equivalent of a day slumped in an office chair, slouching or standing with a flat back for our equine partners and will they feel resulting pain and discomfort in the same way we do? We spoke to biomechanist Russell Guire and physiotherapist Helen Mathie to discover the importance of good equine posture, how to recognise it, how to improve it and the telltale signs of postural problems.

First things first, let's get one thing straight, what is posture? As our expert Helen Mathie explains, put simply, posture is the way your horse orientates his body parts, both when he's standing still and when he's moving. Good posture is the result of joints being positioned correctly and muscles working effectively, and it's essential because your horse needs to use his musculoskeletal system to maintain balance, self-carriage and to enable his muscles to move.

"Your horse's posture can tell you a lot about his general health and it's vital for many reasons," says Helen. "Long-term, bad posture can influence the development of certain musculoskeletal problems, such as kissing spines, degenerative joint disease leading to osteoarthritis or even lameness."

MEET THE EXPERTS



RUSSELL GUIRE, who is Team GBR's World Class Programme Performance Analyst, runs Centaur Biomechanics, which specialises in horse and rider performance analysis.
www.centaurbiomechanics.co.uk



HELEN MATHIE is a human and animal physiotherapist and is team GBR's Para-equestrian Dressage, Equine Physiotherapist. Helen is dually qualified to treat both humans and animals. She's also a National RDA Classifier.

Visually good posture can make a pleasing picture compared with poor posture

How does good posture look?

In layman's terms, a horse with good posture will generally stand square and be well balanced. His cannon bones should be perpendicular to the ground with the centre of mass behind his elbows and aligned below where you, the rider, would sit. Bodyweight will be distributed over his front and hind end, but the distribution of weight doesn't follow a simple 50/50 split.

"When your horse is standing, his body weight is distributed so that 58% of his body weight is on his front limbs and 42% on his hind limbs," says biomechanist Russell Guire. "The horse naturally has a postural sway adjusting his weight from left to right, forward to back, however, approximately equal weighting of the hind limbs would be 21% of weight on left and right hind limb."

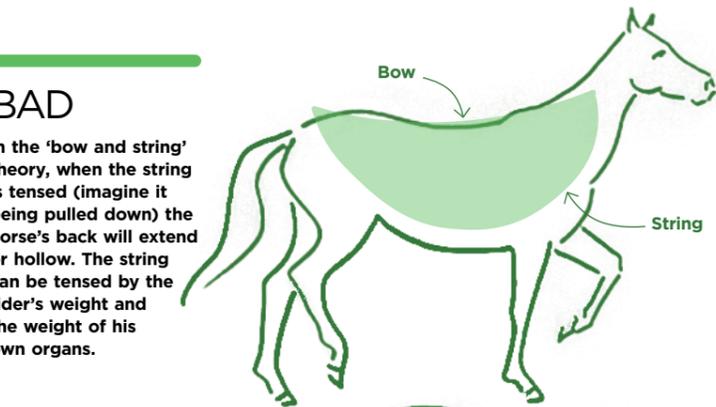
A horse's back also plays a part. "The way the equine back works is often referred to as the 'bow and string' theory," says Russell. "His spine is a bow that's held in place by tension on the string, created by his abdominal wall. Contraction of this wall of muscles tenses the bow to create flexion or rounding of the back. The same happens when your horse engages his hindlegs." The diagrams to the right show you the difference between a back showing good and bad posture.

The signs of bad posture

Being able to recognise bad posture, then fix it, is important. First and foremost, asking your horse to work in a way that's detrimental to his muscular-structure will put him at risk of discomfort, pain and injury. Also, it won't allow him to work at his best and, like

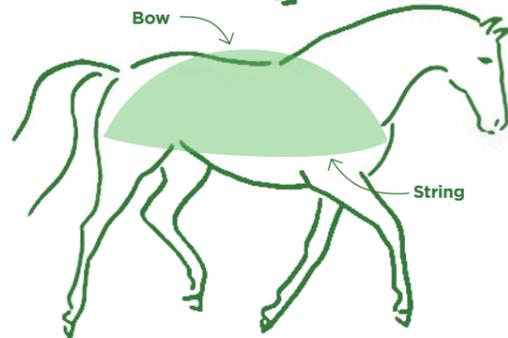
BAD

In the 'bow and string' theory, when the string is tensed (imagine it being pulled down) the horse's back will extend or hollow. The string can be tensed by the rider's weight and the weight of his own organs.



GOOD

What we want to see is contraction of the bow to create flexion or rounding of the back. This happens when he engages his hind legs. Once this good posture has been established, he'll need to use his abdominal and core muscles when working to develop a good top line.



repeatedly stretching the sleeves of a jumper until it's stretched into a new shape, working your horse in the same, incorrect posture leads to changes in his body. "Poor posture is usually seen in horses exposed to unsuitable, ineffective training systems. Over time, this results in adaptations to their musculature and sometimes bony structures," says Helen. Here are just some of the warning signs:

- A ewe neck
- Lameness

- Muscle atrophy (muscle wastage) with signs of a weak top line
- A sore back
- Uneven muscle build-up

Some signs are subtler. For example, if your horse stands in his stable in a specific way, not weight bearing on one of his legs, leaning to one side or even resting his hindquarters on the wall, it could suggest that he's in discomfort. Err on the side of caution and seek advice from your vet.



Allowing your horse to work with bad posture will have a detrimental effect on his way of going

Improving equine posture

The good news is that there are a number of ways to positively change your horse's posture and correct training is number one on the list. "If your horse isn't encouraged to work correctly from your seat and leg into hand, then he'll start to compensate in the way he moves, resulting in poor posture," says Russell. With that in mind, these four things are key:

- 1 Develop symmetry by working your horse evenly on both reins.
- 2 Use training methods that will enable your horse to work in self-carriage.
- 3 Keep your horse fit, strong and flexible using gymnastic work.
- 4 Have regular saddle checks and use a mounting block to prevent your horse developing long-term back problems.

Simple changes in handling and management can also make a positive difference. "Feeding your horse from the ground will help him to develop the correct back and neck muscles, while allowing your horse regular turnout so that he can constantly move and stretch his neck to graze will all help him to gain better posture," says Helen.

Changes you can make

As a rider you can also seriously influence how your horse works, moves and develops and there are a number of common rider errors that can have a negative impact on your horse's posture including:

Ineffective leg aids will cause your horse to brace himself against your leg.

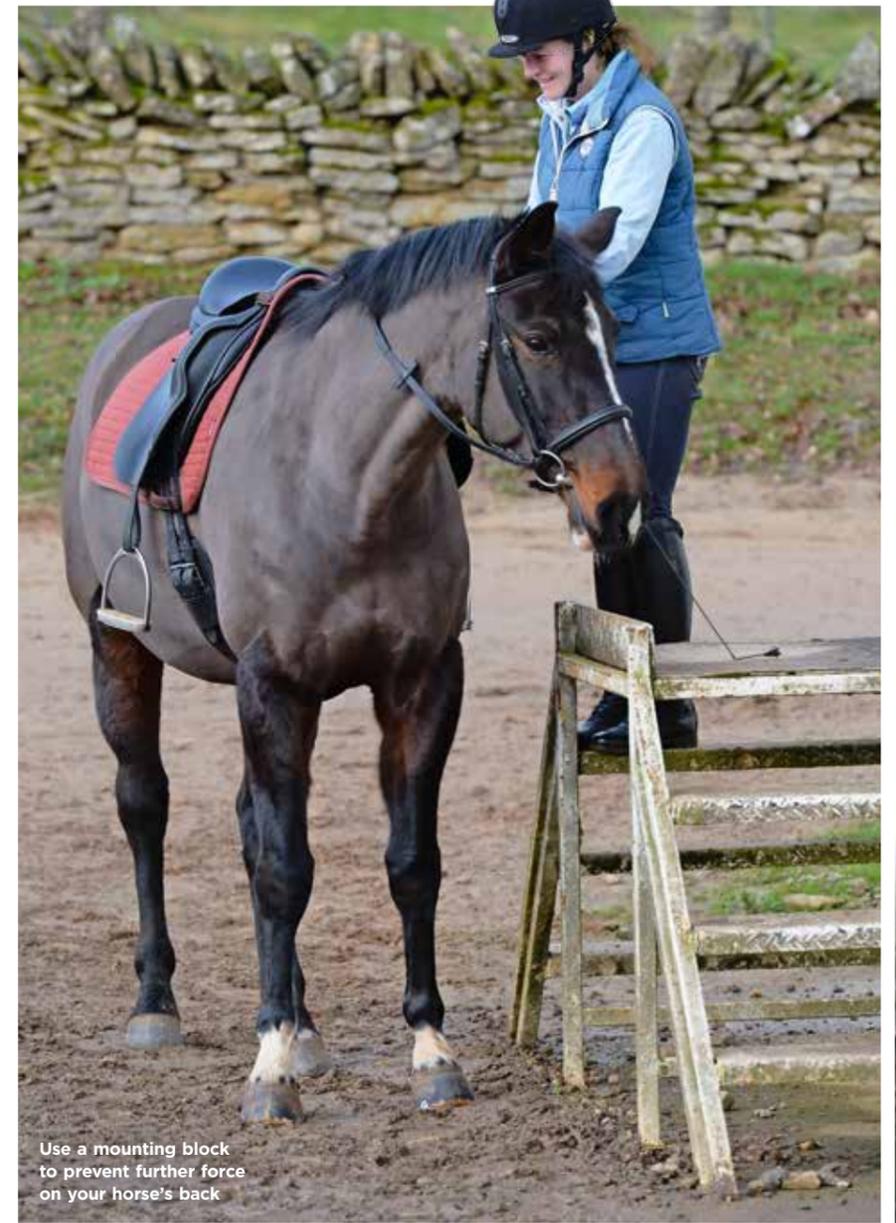
Gripping with your knees blocks his fore limb movement.

Balancing on the reins, using them as a balancing tool will cause your horse to lean and not engage his hind legs.

Leaning forwards will push your weight onto your horse's forelegs.

Leaning backwards pushes your weight onto your horse's thoracic and lumbar areas, causing him to extend his back.

If you recognise any of the above habits in your own riding, seek help from a qualified instructor and/or book a qualified physiotherapist appointment.



Use a mounting block to prevent further force on your horse's back



Daily turnout where your horse can graze will help to prevent any under development of neck muscles

Turn the page for more posture-perfecting solutions

6 easy ways to improve posture

Try these simple, posture-perfecting exercises and treatments



Iron out your horse's aches and pains with a physio appointment

1 Book a physiotherapist
Not only will a physio be able to spot muscular issues, but they'll also be able to alleviate soft tissue discomfort and associated compensations, helping to improve his posture. To find a qualified equine physiotherapist, visit www.acpat.org



Working with a carrot at his side, ask him to flex his neck to reach the carrot

2 Carrot stretches
Only try these if your horse has been assessed by a professional to rule out previous neck trauma, etc, and when he's been fully warmed up. Carrot stretches encourage him to stretch through his neck and back, developing balance, muscle and coordination. Try asking him to reach down to the outside of his fetlock. Let him nibble on the carrot so that he holds the position. Repeat on the other side.

3 Ride serpentine
Working in walk and trot, incorporate three or four loop serpentine into your schooling sessions. The shape of the loops will increase the movement and bend through your horse's body. Simple and effective!

4 Practise pole work
Use trotting poles to help develop your horse's strength through his back and increase his joint range motion. Set out four poles, 4ft (1.2m) apart and trot over them.



Allowing him to stretch through his back, over poles, can help to improve his posture

5 Switch surfaces
Different surfaces can impact on your horse's movement and his posture. Too deep and he has to concentrate on his balance, as well as propelling himself forward. Uneven ground means he'll be unable to apply equal weight to his footfalls. Flat, non-shock absorbing surfaces, such as tarmac, can compromise his posture. The solution is to cross-train your horse on varied terrain - making sure it's quality terrain without deep surfaces. It'll be beneficial as he'll learn to cope with the changing footing.

6 Check your tack
Ill-fitting tack can result in postural compensations, which can lead to lameness. For example, if a saddle pinches on one side, the horse wearing it won't work symmetrically, building up uneven muscle and applying strain on his legs. Bridles also have a part to play - Russell's research into the pressure associated with bridles showed that when poll and noseband pressure is reduced, horses locomotion improves. We recommend you ask an expert to check your tack but for tips from SMS qualified saddle fitter Diane Fisher, visit www.yourhorse.co.uk/fitting



Asking your horse to flex and bend around the arena increases suppleness and self-carriage