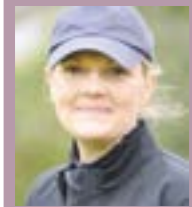


OUR EXPERT

Justine Harrison



As a certified equine behaviourist, Justine uses the science of behaviour to help owners understand and solve a wide range of issues with their horses and ponies.

Vertical limit

Is the quest for the perfect outline causing discomfort and physical injury? Justine Harrison considers the issues that can be created by holding a horse in an unnatural position

The head and neck position of the ridden horse has become one of the most hotly debated topics of the equestrian world.

Photographs and video footage of horses held in 'hyperflexion', their heads pulled into their chest or twisted to the side have caused outrage and called into question the training methods used by some competition riders.

Not only is it uncomfortable to look at, the use of hyperflexion – also referred to as 'Rollkür' – can cause the horse extreme stress and even physical injury.

Rollkür is banned by equestrian sport's governing body, the FEI (the International Federation for Equestrian Sports), yet it's not just this extreme deep, low and round outline that could be causing discomfort and physical damage to horses.

Anyone pulling a horse's head in towards his chest could be creating problems.

As owners and riders, it is essential that we ensure our horses are comfortable when performing the work we ask them to do, whatever the method of training we follow, and the type of tack and equipment we use.

The key question is should we really be altering a horse's head position at all?

How horses use their heads

Naturally, horses would spend up to 18 hours a day – around 75 per cent of their time – grazing. They will move with their heads down, but every

now and then will lift their head to look briefly at something of interest. During the remainder of their day they would doze and sleep, play and perform other behaviours like mutual and self-grooming.

A small proportion of a wild horse's time is actually spent with the head elevated. For us to ask horses to spend long periods of time with their heads raised is unusual for them.

It is also unnatural for equines to spend long periods stabled, pulling hay from a net hung above their heads – the repeated, tugging movement required to access their forage can cause physical problems in the neck and back. ▶

Photography: Shutterstock/labrador Photo Video/olgaru79



Behind the vertical – an unnatural position for the horse to hold

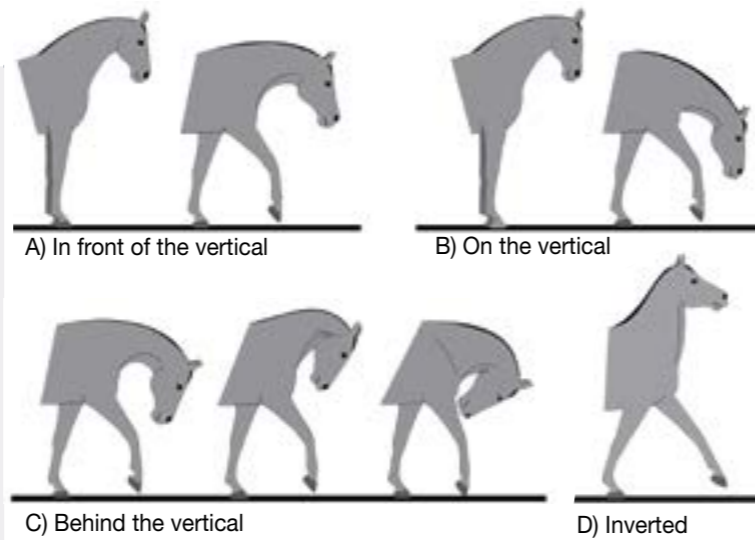
At higher levels of dressage, the horse is required to have his head on the vertical, with his poll as the highest point

Normal head carriage

When a horse moves forward freely, he usually carries his head raised above wither level. The neck will be long and relaxed – held forward and up, with the nose out in front (see A, right). Carrying his neck in this way, a horse can balance himself and adjust the level of his head to see his surroundings clearly.

When a horse is ‘on the bit’, his head will flex at the poll and the nasal plane (the front of the face) will be vertical and perpendicular to the ground (B).

When the head is held ‘behind the vertical’ (C) the nose is pulled back behind the vertical line that would normally drop from the horse’s poll.



Illustrations: Cristina Wilkins, taken from the ISES head and neck position statement

The quest for self carriage

When we ride, we ask our horse to move with the head raised for longer periods than would be natural for him. Of course, horses know how to carry their own head and neck, and they learn to balance themselves as they grow up.

However, a rider’s weight upsets that balance, so we need to teach them to carry us and build their physical strength to do this efficiently and without causing damage.

A horse’s weight is distributed over his forehead and hindquarters. The position of the head and neck means a greater amount of weight is carried on the forehead. A rider’s weight adds to this.

One of the functions of dressage training is to ‘lighten’ the forehead. When the hindlegs are engaged, he is able to carry his body in a balanced way, without needing support from the rider. The horse is then said to be in ‘self carriage’.

This training should be progressive and taken step-by-step, according to the individual horse’s physical and mental maturity.

Training should start with the horse working in a ‘long and low’ outline and, as he becomes stronger, gradually progressing towards a more ‘collected’ frame with the head more elevated

and the neck arched. For the horse to achieve this advanced posture, and become strong enough, takes time – years, in fact.

Quick fixes

A number of devices and training methods are used as a short cut, in order to achieve the more rounded and elevated neck position quicker than progressive training.

Draw reins are one gadget commonly used to alter the position of the horse’s head and neck.

These long reins attach to the girth, then pass through the bit rings to the rider’s hands.

The rider can pull the horse’s head down into a flexed position and easily maintain it, without much effort or training.

Some riders and trainers believe that over-flexing the horse’s head in this way will make him more supple, build up his back muscles and train the arched neck position they are looking for in the higher levels of dressage.

However, there is very little evidence to support this as a beneficial method of training. In fact, a mounting body of evidence shows that over-bending the neck is in fact damaging both physically and psychologically.

Draw reins are commonly used by showjumping riders, too, including in the warm-up before a competition and in prize givings.

The good news is that some countries are taking a stand against these ‘training aids’.

The Swiss have banned draw reins at national shows, and The Netherlands has adopted a similar rule, although they are still allowed in prize givings.

The use of draw reins is under discussion by the German Equestrian Federation, which states that it disapproves of any aggressive riding or training methods which entail a forceful handling of the horse.

The Rollkür debate

Rollkür is a method of training where the horse’s head is held overbent in ‘hyperflexion’ for periods of time while schooling.

Usually the horse’s nose is pulled to their chest, either by the rider’s hands and reins, or in some cases by a strap tying their head down.

The horse’s head may also be flexed to the side and the nose pulled towards their shoulder on each side alternately.

Why would someone force a horse into this uncomfortable position? There are some who

believe that it results in a bigger foreleg action, and that it raises the horse’s back. There is no credible evidence to date to support this.

Rollkür came to public notice as a welfare issue in the 1990s and the FEI banned the method from competition in 2010, stating that flexion of the horse’s neck achieved through aggressive force, was “unacceptable”.

Despite this, training methods are still coming under scrutiny, with the belief that there are riders continuing to use hyperflexion.

In response to the training practice, The International Society of Equitation Science (ISES) has written a position statement on head and neck position.

“The issue of horse head/neck position has been subject to much scrutiny since 2005 but little progress appears to have been made regarding policing the practice,” says ISES senior vice president Hayley Randle.

“The press repeatedly observes and uploads via social media images of horses in prolonged and unnatural head and neck positions.

“The intention of our statement is to provide a detailed evaluation of the use of various head and neck positions within equitation and to continue to promote and foster good relations over a common area between scientists and practitioners.”

The ISES position statement can be viewed at www.equitationsscience.com.

Risking physical damage

Let us consider the physical impact of the horse being asked to move in a restricted and unnatural way. According to equine therapist and anatomist Gillian Higgins, “an excessively over-flexed position will restrict movement”.

“The horse is unable to use his head, neck, back and fore and hind limbs correctly,” says



Photographs: from Posture and Performance, by Gillian Higgins

Gillian, author of *Posture and Performance* (published by Kenilworth Press, visit: www.horsesinsideout.com).

“In this case, performance and comfort may well suffer. We could not run a marathon with our chin on our chest!”

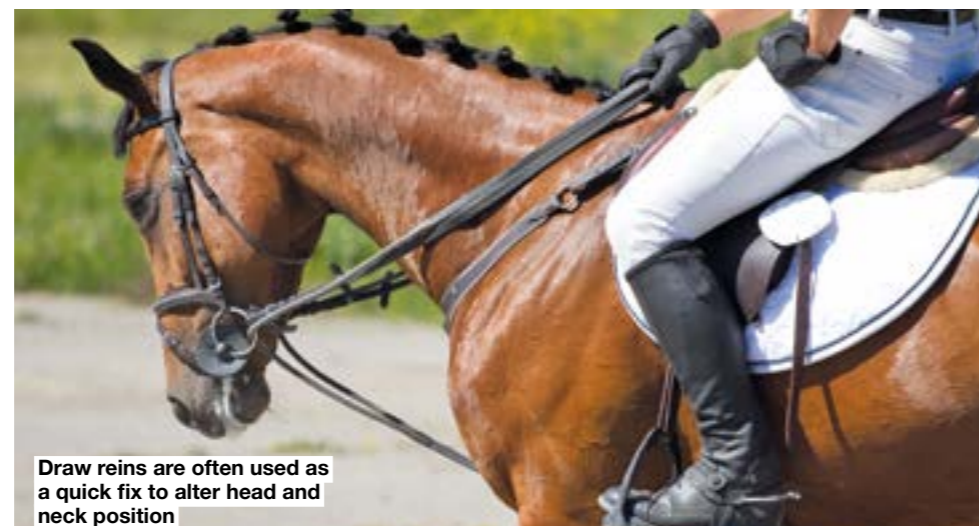
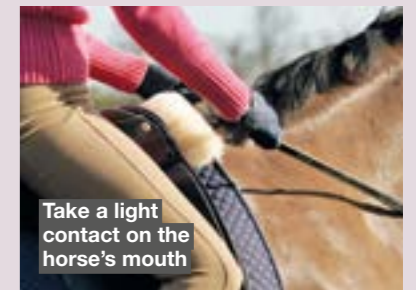
The horse’s breathing can also be affected. “For maximum efficiency, the airways need to be unrestricted and open,” Gillian states.

“Any artificial head positions, whether created by restraining tack or the rider’s hands, will cause some restriction, making it difficult for the horse to breathe.

“When extremely overbent, the horse may struggle to breathe, ‘make a noise’ as the vocal cords vibrate, or resist the rider’s demands by dropping the head or coming behind the bit.” ■

Top tips for better horse posture

- Feed hay on the floor, rather than in nets or mangers high up.
- Create a progressive training plan for your horse.
- When schooling, warm your horse up in a long and low outline.
- Sit up and look forward to help your horse lighten his forehead.
- Use a light contact with the horse’s mouth and release any pressure the instant he does what you want. If you feel you need to increase pressure, stop and assess why your horse cannot do what you are asking.
- Allow your horse frequent breaks when schooling and let him stretch down to relieve any muscle tension.
- Be patient. Achieving the correct outline must be done gradually, with progressive training.
- Stop what you are doing if the horse shows any signs of discomfort – grinding his teeth, swishing his tail or opening his mouth. Consider what has caused this, and address the issue.



How neck position influences behaviour

A German study found horses displayed more behavioural signs of discomfort when their heads were held behind the vertical, compared to a normal head and neck position.

Kathrin Kienapfel and a team from Ruhr University studied 85 horses while their heads were held in various positions.

First, 25 horses had their heads moved into seven commonly assumed positions:-

- Standing relaxed;
- Head stretched forward;
- Head down (as if eating);
- ‘Gathered’ – head up, in front of the vertical;
- ‘Tucked’ – head up, in line with the vertical;
- High, with the head lifted upwards;
- Hyperflexed, in a ‘low, deep, and round’ position.

Next, 60 horses were evaluated at a show – without the knowledge of the riders.

Half of the horses were ridden with their nose in front of the vertical, and half with their nose behind the vertical. In both situations, the researchers observed the behaviour and body language of the horses.

They looked for behaviours that may indicate conflict, such as head tossing, tail swishing and pulling at the reins. They also noted signs of discomfort – for example, opening the mouth, sticking out the tongue or pinning the ears back.

In the first part of the study, nearly half of the horses showed discomfort behaviours when their heads were held in a hyperflexed position. More than a third displayed discomfort behaviours in the ‘tucked’ position with

the nasal plane in line with the vertical. Eleven per cent of the horses showed discomfort when their heads were held in the ‘gathered’ position.

At the show, 89 per cent of the horses ridden with their heads behind the vertical showed signs of discomfort.

Only 10.7 per cent of those with their heads in front of the vertical showed signs of discomfort. Most signs of discomfort were shown by horses in a hyperflexed posture, compared with other postures.

“Dressage horses are commonly ridden in competition warm-ups with their nasal plane behind the vertical – this posture seems to cause significantly more conflict behaviour than in front of the vertical,” concluded the team.