

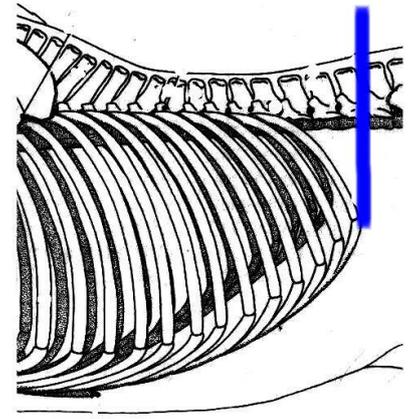
Is my saddle too long for my horse?

Written by Lesley A. Taylor for BALANCE 2018

In recent years, Conventional saddle fitters seem to have become obsessed with the idea of keeping saddle tree and panel length within the restriction of the "18th rib", but is this a 'rule' that must always be adhered to in order for our horses to be safe and comfortable under saddle? Well, no, not necessarily; the answer is not at all straight forward...

Confusion right from the start!

The first thing to say is that there is no general agreement on where the '18th rib' position is in relation to saddle fitting! The 18th rib, is attached to the 18th thoracic vertebra, but from this attachment, the rib curves out and backwards, before curving forwards again to connect into the other ribs, to create the rib cage. See the diagram.



Some people believe that a saddle should not extend beyond the position of the actual 18th thoracic vertebra, which makes the useable back length on all but the largest of horses unsuitable for anything much longer than a child size saddle!



We (BALANCE) use the point where the curve changes in this rib, to define the positioning of the 18th rib.

We use a simple method of clarifying where this place is and then measuring how much space there is for a saddle between this point and the area behind the withers that the shoulder blades need to move to. We have produced a photographic guide to show how we do this.

I will add a PDF version of this information to this Website Article for you to use.

How far back is too far!

There are numerous examples in our history, of horses being ridden with the rider sitting much further back than we do now. Think of the traditional Spanish riding, where the lady sits sideways on the horse, behind her man, usually on a cushion that is attached to the back of the saddle; Icelandic 'horses', are ridden by adults who deliberately sit their weight further back than the 18th thoracic vertebra; American Cowboys often ride horses that are small, relative to their own size and weight, in heavy and long Western Saddles that always extend well beyond the 18th vertebra and military saddles with their extended panels also sit beyond this point as well.

Within the history of horses being ridden by humans, one could say that it has been far more common to position the saddle and/or the rider's weight further back than we currently do.

There are many occasions when it is simply not possible to provide a horse and rider combinations with a saddle that meets the criteria of the 18th rib 'rule'.

With small horses (Icelandic and Arab horses for example), if you try to provide a saddle that only makes contact from a point well behind the shoulder blade (to ensure that it does not interfere with the natural rotation of the shoulder blade during movement) to no further back than the "18th vertebra", you will often find that you have about 15 inches to work with or less - far too small an area to carry anything other than a small child! Even on bigger breeds, it is not uncommon to find that you only have less than 16 inches of room.

The fact is, that we see a lot of sore backs and unhappy horses as a result of being ridden in saddles that are too small (short in the tree) for the rider, and these horses would often be far more comfortable in saddles that many current saddle fitters would reject for being too long!

Provided that the saddle and rider are well balanced, and the horse is being ridden well, so that if the panels are in contact with the horse's back beyond the " 18th vertebra" they are not carrying any more weight than the rest of the panel, a slightly longer saddle is usually not a problem. However, if the saddle is too narrow or placed too far forward and therefore out of balance, (*so that it tips the rider back and concentrates their weight over the lumbar area*) it can cause big problems for the horse. Whereas, if it is wide enough, well placed on the horse's back and well balanced, most horses are perfectly happy, comfortable and thriving with a saddle that extends onto the lumbar area, to some degree.

Is it safe to say that all horses are OK with saddles that extend beyond the 18th rib?

No, I am not suggesting that this practice is always appropriate. There are definitely *some* horses who seem to struggle when the weight they are carrying, extends too far back, but I would argue that this is often due to:

- an old injury/compensation that makes the horse more vulnerable,
- starting the horse under saddle too early in its life, when it is not physically mature/strong enough,
- poor training and riding methods that create a weak organisation in the horse's posture and movement,
- restrictive saddling methods that create a weak organisation in the horse's musculature, posture and movement.

But... to use examples of horses in these unhealthy predicaments to create a 'rule' about saddling for all/every horse and rider, makes no sense and, in our experience, has caused a lot of confusion and even caused damage to horses, which is the reverse of the aim of the 'rule'!

When you look at the bio-mechanics and the structures of the horse, it makes no sense to describe the lumbar area of the back as weak, by comparison to the thoracic section of the spine, and yet this is something that is commonly believed and promoted by saddle fitters.

So how has this belief become so widespread? When you look at the way uncomfortable saddles, unbalanced/unstable (and therefore, uncomfortable) riders and poor training methods impact on the way the ridden horse uses his body, almost without exception, it involves a disengagement of the hindquarters and, as a consequence of that, a weak and unstable connection between the lumbar spine and the sacrum. Just as in humans, the lumbar area of the back is supported by strong and powerful muscles. One would never describe this area of the *human* back as 'weak'. However, it is often the area where repetitive unbalanced and unstable use of the body can lead to those strong muscles working against each other and creating spasm and pain.

When a horse is ridden in a structured, educated and supportive way, the rider helps the horse to maintain enough engagement and stability through its lumbar spine, to protect it from the unnatural stress of carrying a rider. This creates a level and strong posture that is perfectly able to carry some weight.



Engagement of the hindquarters = lift and stability through the spine, and frees the forehand and the front legs from excessive weight and stress during movement. A horse, free from the burden of a rider will organise its body into this efficient posture when moving, but needs to be helped (trained) to do the same when carrying the weight of a rider! Without correct training, the rider's weight is carried too much by the horse's front legs, the hind legs get pushed back and too far behind the horse to support its own weight, let alone the rider. The back becomes weak, unstable and the whole structure of the horse is then vulnerable and under stress.

Look at the picture of the chestnut horse and see the way the hindlegs are being pushed a long way back behind its body and the back has become saggy and weak. You will also see that the abdominal muscles are also disengaged, making the horse look like it has a big belly (sometimes convincing the owner that the horse is over-weight) This is a very unnatural and stressful way for a horse to use its body and the accumulated damage can be great.



As well as being a very risky way for a horse to carry the weight of a rider, the dropped/curved posture effectively shortens the available back length significantly when considering the saddle. The curve of the disengaged back tends to lift the front of the saddle, tipping the rider's weight and the panels of the saddle back, onto strong reflex points in the horses back, that lie close to the position of the 18th vertebra. A rider and saddle that are putting too much pressure directly over these reflex points will be causing discomfort and a further contraction of the long back muscles!

A horse regularly ridden like this can definitely exhibit soreness in the lumbar area and object to the pressure of the saddle panels, but this does not necessarily mean that the saddle itself *created* the issue, and it does not mean that reducing the length of the tree/panels to try to avoid the sore area is helpful. Even horses that are ridden in saddles that are well designed and used in a constructive



way, can end up back sore because of the way they are being ridden!

What is needed is a remedial/therapeutic training, riding and saddling approach to allow the horse to recover its healthy posture and movement.

This is a very powerful *looking* horse, with a very weak posture/organisation!

He might look like he could carry a big rider, but when you look at him more closely, you can see that he would be very vulnerable to damage if he stays in this dropped back organisation when being ridden!



Here is another picture to help explain the problems that a weakened and dropped posture create.

Can you see that the distance between the horse's pelvis and wither has, in effect, reduced so that there is less available level length for the saddle to sit on and a much weaker structure to carry the unnatural weight of a rider?

If the horse can be helped to recover the normal/natural bio-mechanics of movement, where the back is lifted and engaged, particularly in the paces where some suspension is present in the stride sequence (trot and canter), the whole back starts to lift and effectively lengthen. We would argue that once a horse looks as compromised as this one, it should be seen as unfit to carry a rider's weight in the same way that a horse that is lame through injury is unfit to carry a rider's weight. The fact that horses are willing to carry riders when they look as weak as this one, does not make it right! We would be recommending a period of Remedial training without a rider for a while to allow the horse to recover enough to make it safe to continue a Constructive Riding and Training programme in combination with a Remedial Saddling method.

Can every horse recover a healthy posture and organisation?

It is important to establish whether the horse is still physically able to lift its back up from its static/disengaged posture. If a horse has been asked to carry a rider for a long time in a disengaged state, it can make permanent changes to the structures in its body, that no amount of therapy, remedial saddling and remedial riding can change. This can be checked by gently pressing upwards in the reflex points situated under the sternum in the girth area).



Note: If the horse appears to be locked into a dropped back posture, it should not be ridden and veterinary advice/support should be sought.

What is Constructive, Therapeutic or Remedial Riding and Training?

Here are some key ingredients:

1. Riding at the correct tempo, so that the horse's movement can be easy and balanced, without the need to brace, (most riders ride at too quick a tempo within the paces and too fast in mph, for their horses to use their bodies efficiently and in an elastic, healthy way).
2. The Rider taking responsibility for their own balance and coordination, so that they don't burden the horse with their lack of balance. If the rider does not take responsibility for their own weight, the effects of their weight on the horse will be magnified.
3. Not rising (or posting) to the trot by pushing down into the stirrups, as this is likely to stimulate the reflex points under the points front of the saddle, which will cause the horse to contract (shorten) his back.

4. Not spending too much time in walk, because it is much harder for the horse to lift its back into the engaged state it needs to be in to safely carry the weight of a rider, when it is in walk. It is easier for the horse to lift its back into a more supportive organisation in the paces that have some suspension in the stride, e.g. trot and canter. When hacking out, it is not kind and not healthy to spend the whole time, or the majority of the time, in walk, particularly if you also ride with a loose rein contact or no rein contact! It is much kinder to the horse to do some rising trot regularly, even for short periods, to give its back some relief and the chance to engage its body into a better weight carrying organisation.
5. Ensuring that the saddle is designed to respect the structures and movement, in a width that allows the use of a therapeutic padding system underneath (Constructive Saddling). The saddle must be stable and balanced front-to-back, so that the rider's weight is spread evenly along the length of the panels. Then the reflex points, both under the front and back of the saddle, are not over-stimulated and the horse is invited to engage his back and whole body up into the space and comfort that the saddle/pad combination is providing.

One last thought.



Is the rider of the horse just the wrong size and/or shape to fit into the saddle that is right for the horse? This is what is referred to as a 'No Brainer', but it is sadly something we see on a regular basis.

If the rider needs a seat size in a saddle that is just too long for the horse they are riding, either because they have a very large bottom, and/or are very long in the length of their femur, then they need to find a different horse!

I would hope that most Saddle Fitters/Sellers would be willing to risk offending the rider by pointing this out, for the sake of the horse or pony they are dealing with, but sadly, we see too many examples of professionally fitted saddles that are just too small for the rider and therefore, causing all sorts of other problems for the horse or pony trapped underneath!

To summarise:

Do not assume that it is necessary or helpful to every horse to be ridden in a saddle that does not extend beyond the position of the 18th vertebra, or even the 18th rib!

It is far better to adopt an Holistic approach to the way you decide on what is appropriate for each individual horse and rider combination. Adhering too rigidly to a specific 'rule' and applying it to every horse, can lead to as many problems as the 'rule' is trying to avoid!