

Divergent Theories

On Saddle Fitting



There are many opinions and theories on saddle fitting. Occasionally we have even heard riders say “I have been using my saddle for x number of years. It fits me perfectly and fits every horse I use.” I have to really bite my tongue on that one but usually just manage to smile and say. “Lucky you”. Some people are unfortunately just not open to being educated on the facts that have been substantiated in recent years through MRIs, thermography, and fibreoptic cameras, and do not realize the possible damage they are doing to themselves and their horses. I am going to deal with two main theories on how to fit saddles properly, but there are probably several other variations on this theme.

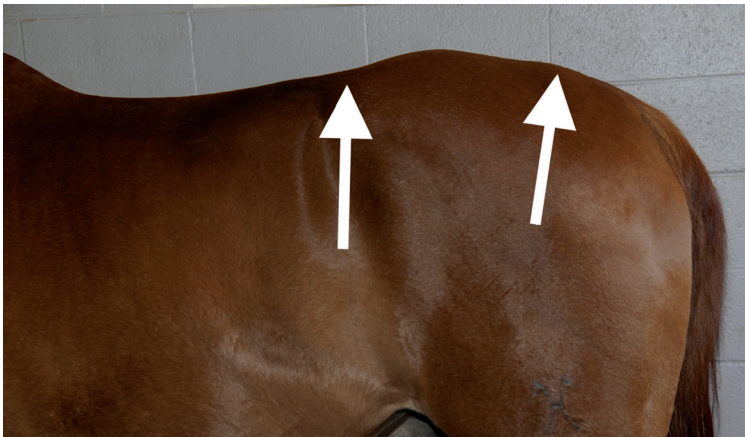
Theory One

Many saddle manufacturers and their trained saddle fitters maintain that a saddle should have a narrow channel, therefore sitting on the spinal processes and ligaments. The tree is long and flat (resting on the shoulder and lumbar area) and sits with minimal weight bearing surface on the musculature. In this scenario, the saddle barely moves because it is sitting on the spine (other than perhaps to twist during motion as it is 'kicked back' by the bigger shoulder – but this will be addressed in a future blog). This saddle rarely does need to be adjusted because bone structure and ligaments do not adapt and change their conformation through training like muscles do – and the muscles really won't change much because the horse simply is not able to use his muscles properly with a saddle that fits like this. Often people will say “my saddle always fits” or “my saddle fits any horse”. They are semi-right, because one advantage to this is that they do not have to have a saddle fit or modified. The horse doesn't really change.

The disadvantage with this is the spine and ligaments will not tolerate prolonged compression and the horse's back movement is restricted. To protect the shoulder, lumbar and spine, the horse will get tighter and tighter in its back (especially in the lumbar area), which leads to cramping in the gluteus maximus muscle. The horse will then develop a dip in front of its SI and the glutes will seize up. Between the SI joint and the tail, the gluteus will become atrophied (see image below). The front end of the horse will then push down the base of his neck and will 'break' over C3 in order to get on the bit. At this point it will become difficult for the rider to get the horse supple through the poll and have his highest point at the poll and not at C3.

Theory Two

In complete opposition, the other theory (the one we like!) is for the saddle to stay off the spine, lumbar vertebrae, and shoulders – while maximizing the surface area the saddle sits on. The saddle support area is on the weight bearing longissimus dorsi (long back muscle). The advantage to having the saddle on the saddle support area muscle is to stay away from the reflex points that create negative behaviour or negative conformation and health issues. Staying off the spine, lumbar area and shoulder keeps the back muscles loose and supple. Your horse can then articulate through the SI joint, and use his haunches better by stretching his gluteus maximus and ham-



▲Example of the negative effects of a theory #1 fitting saddle. Dip in front of SI, Atrophy between SI and tail.



Courtesy of Schleese

string. In theory one, where the saddle sits on the ligaments, involuntary contractions (ex. cramping) impede correct co-ordination of muscle contractions and thus full range of motion is not possible. In contrast, theory two allows for both stretching and contraction of the muscle (full range of motion). The most efficient way to train is to maximize both flexion (contraction) and extension (stretching), and in order to achieve this, full range of motion is required. By reducing the pressure on the shoulder your horse will be able to lift the base of his neck and become supple through the poll. With theory number two, by allowing the horse to fully engage his muscles and lifting his rib cage, he will become more uphill and the balance of the saddle will need to be readdressed many times throughout his career due to his positive changes in his conformation.

In theory number one, because the saddle is mainly sitting on the spine, with limited contact on the back muscle, the horse will continue going but his body will take a toll. He will continue developing incorrect muscles and deformities will become more visible. Eventually, the atrophy in the back muscles and compression of the spine will lead to permanent damage. With theory number two, the increased range of motion will cause temporary soreness due to greater lactic acid build up (just like we have after using muscles during a new workout) which is nature's way of recovering muscle fibre, but the result in greater muscle formation and increased circulation. During acute soreness, keeping pressure off the muscle would appear to be logical, however, somewhere the saddle needs to be supported.

If the horse has been in ill-fitting saddles in the past that have caused some back pain (as in theory one), don't be discouraged if your horse shows signs of muscle soreness after switching to a saddle fitted according to theory two, as this is good muscle soreness (as mentioned above). You can temporarily help your horse by having the back of the saddle a bit looser (by loosening the V webbing back clip for instance). Yes, this will make the saddle move more in the back (up and down, not onto the spine!), and onlookers may misinterpret this as bouncing or an ill-fitting saddle. However, you will know if you choose to go with the theory number two, that this is part of the process to help your horse. It will help him heal, get stronger, and develop correctly.



Saddle support area