



Glossary of Terms

L	R
1	1
2	2
3	3
4	4

Each of the muscle groups, whether they are correct or compensating, have a score assigned to them. Each side of the horse is represented by R (right) and L (left). As you can see by the different numbering in those individual boxes, muscle groups seldom have the same number, which indicates an asymmetry of the horse's anatomy.

- (1) Indicates that there is an underdevelopment.
- (2) Would indicate that muscle exists, but either requires more developing for a correct muscle group, but would indicate good muscling for a compensating muscle group.
- (3) Would indicate good muscling for a correct muscle group, but would indicate too much development on a compensating muscle group.
- (4) Indicates an excellent development on a correct muscle group, but an overdevelopment of muscling on a compensating muscle group – there will be further explanation with each illustration.



LONGISSIMUS DORSI – The most important correct muscle group of the horse. This strength of this muscle determines how easy the horse can carry the weight of the rider, and have the ability to compete in the upper-levels of any discipline. Often called the top-line, it is the main muscle that is required for thoroughness. This muscle is attached to the head of the pelvis, runs across the back, connecting to all of the thoracic ribs, and inserted in cervical vertebra C-2, C-3, C-4, & C-5. It is best developed at the walk or canter, with the head moving in a relaxed 'bobbing' movement with the motion of the gait, and the pelvis closing, or sitting down with each step.

- (1) Indicates that the horse is most likely high-spined, may have a sway back, will have a flat pelvis, tension in its poll & jaw, and will be very unhappy under saddle.
- (2) Indicates a horse that may be just started under saddle, or a horse that needs to stop working on the discipline, and start working on muscle building exercises.
- (3) Indicates good muscling.
- (4) Indicates the horse is an athlete, and is probably capable of doing well in any discipline.



ILIOCOSTALIS – It supposedly has a purpose, but the development of this compensating muscle can tell a very elaborate story. Often found to be overly developed on the stronger side of the horse, its degree of muscling tells us which side of the saddle the rider is sitting, the inward movement of the passive hock, and outward movement of the strong side fore, & also if the horse is bracing on a rein for support. It can be found by running your hand down the center of the back about 10 inches from the spine.

- (1) This horse has developed this muscle group on both sides. It will be middle hollow, tense in the poll and jaw, and be very uncomfortable to ride due to its very wide barrel.
- (2) A definite ridge on one side that almost leaves a shelf for the saddle to sit. This horse will also be bracing on the rein on that same side, and will be stiff in that direction.
- (3) A definite ridge felt, but not necessarily enough to cause the horse to move with compensation.
- (4) There should not be a noticeable ridge of muscles – the rider is sitting centered on the horse's back.



LATISSIMUS DORSI (Latts) This correct muscle group is connected on top of all the thoracic vertebra, and inserted in the humerus. The strength of this muscle group determines how easy the horse can come off the fore, it also determines if the horse is camped under. The development of this muscle group, is what Dr. Deb Bennett calls 'coming up in the withers'.

- (1) Indicates that this horse will usually be camped under and have coffin bone issues, would work on the fore, usually be downhill, and would have a difficult time doing dressage work.
- (2) Indicates a need to have the horse work on opening its humerus. This could easily be a saddle issue, where the saddle is preventing the shoulders from going under the saddle. (An issue often found in thoroughbreds).
- (3) Good musculature development.
- (4) This is the musculature required to do upper-level dressage – horses with this muscular development are very light on the fore – required musculature for the lavad and other circus movements.



BRACHIOCEPLALICUS Often called the necks under muscle; its purpose is to help pull the fore limbs forward. However, if it is overdeveloped, it can create a middle-hollow back, with tension in the poll and jaw.

- (1) Indicates that there is a real problem. In certain breeds that have a tendency to excessively brace on this muscle group, Frisians and Arabians, this is often attributed to a saddle placing too much pressure on their larger sensitive wither muscle – which can be attributed to a poorly designed or fit saddle placing them in a state of submission.
- (2) Indicates a horse is having a bracing problem and mostly likely has a weak passive hock.
- (3) Indicates that there might be an asymmetry taking place and that the horse may be bracing on the rein on the side of that overly developed muscle.
- (4) Indicates the rider is not bracing, and most likely sitting in the middle of the saddle – happy horse.



CERVICAL TRAPEZES An extremely necessary muscle group of the dressage horse. The correct development of this muscle group is reflective on how the hind-quarters of the horse is muscularly developed.

- (1) Nonexistent – this is usually indicative of a horse built upside-down – overly developed brachiocephalicus (under muscle).
- (2) This could be a young horse, or a horse that has been off work for a while.
- (3) Good muscular development.
- (4) Upper-level dressage horse – a balanced athletic frame.



THORACIC TRAPEZES (wither) this is muscle of submission, versus a muscle of strength. It is this muscle group that protects an array of nerves and meridians that pass under it from the spinal cord to most of the vital organs. It is this same muscle in a dog or cat, in which the parents bite will put the puppy or kitten into a manageable fetal state – the bite of the saddle can have the same affect.

- (1) This is the extremely wide wither – often associated with the Arab & Frisian. This requires a special saddle that has a more open pommel, preventing pressure on this muscle group.
- (2) This wither is wider, and a saddle where the panels are attached inside the pommel (about 90% of all saddles), can make the horse both girthy and unwilling to go forward.
- (3) This is a narrow wither often associated with the Thoroughbred. All saddles will have an affect on this muscle group, and the only remedy, is adjustable air panels to cushion the saddle from sitting on this narrow wither.
- (4) This is a normal wither, and should not be an issue with the fit of a saddle – usually associated with a Warmblood.



GLUTEUS/HAMSTRING These two opposing muscle groups are responsible for the horse being ‘through’ – the retraction and propulsion of the hind quarters. To have the correct reciprocal action (stepping) of the pelvis, these two muscles groups need to be even, making the muscling of the rump of the horse look even without any distinguishing division between those two muscle groups.

- (1) There will be noticeable dip in the pelvis between these two muscle groups – this is often a secondary problem of the saddle interfering with natural biomechanical movement of the shoulders – if the front end can’t move correctly, the back end can’t either.
- (2) Only a slight dip, between those two muscle groups – could just be where the horse is in their training.
- (3) Good conformation – no noticeable transition variation between those two muscle groups.
- (4) Excellent – an athletic horse.

Below the scoring boxes there are 5 additional Entries:

- Frt/Rear Balance – This is how the horse is working from rear to front 45/45 is ideal, 40/50 is working a little on the fore.
- Movement – Lr/Rf is a left sided-horse, RR/Lf is a right-sided horse
- Glut to Ham – Is measuring the balance of the hind-quarters of the pelvis +/- + is ideal, -/+ is lacking gluts, +/- is lacking hamstrings, -/- is lacking both.
- Girth – Heart girth measurement – subtract 50 for the correct dressage girth, subtract 25 for the correct jumping girth.
- Back – length of useable back for a saddle (thoracic ribs)

The Complete Picture

