http://equinemechanics.com/post/128568891748/unmounted-rider-exercises-to-improve-your

Unmounted rider exercises to improve your seat: Strengthen & straighten your own core.

So whilst we're looking a little at strengthening the horse's core, and before we get onto ridden exercises, let's do the same for the rider.

There's growing research evidence that improving your seat off the horse is a great thing to do because a) it's effective - who doesn't want a better seat - and b) you can correct muscle patterns more easily when you and the horse aren't encouraging each other's asymmetries. Get your core stability correct, it'll be easier to get your horse correct. You can spend hours fighting not to collapse at the hip, to sit straighter, deeper, drop your thighs down, toes in and get the horse engaged, to stay with him over jumps, but it's never going to be as effective as just correcting your own muscle weakness before you start.

Also in exciting news I broke my ankle and so unmounted exercises are quickly becoming my thing. A broken ankle is pretty common in horse riders so this should also help my fellow sufferers whose days are currently filled with repeating "can I ride yet?" I can't get you back on the horse yet, but at least we can make sure that when you do you haven't lost all semblance of riding ability, and might even have improved a bit. Might come in handy if your horse has been laying off while you recuperate!

Step 1) Caring: I haven't broken anything, why do I need to strengthen my own core?

The rider's seat is an active process. "Sitting on a horse" sounds passive but an engaged seat requires a lot of muscle strength and coordination. Phrases like "go with the

movement" are not that helpful as it makes you feel like you just have to find the right kind of wibbly wobby relaxation.

Find something now: a bouncy ball, a sweet wrapper, anything lying around that you can put in your hand and trust to stay completely relaxed. Now bounce your hand sharply up and down, and see how fast you can go whilst it stays in a deep contact by just going passively with the movement. How's that working out for you?

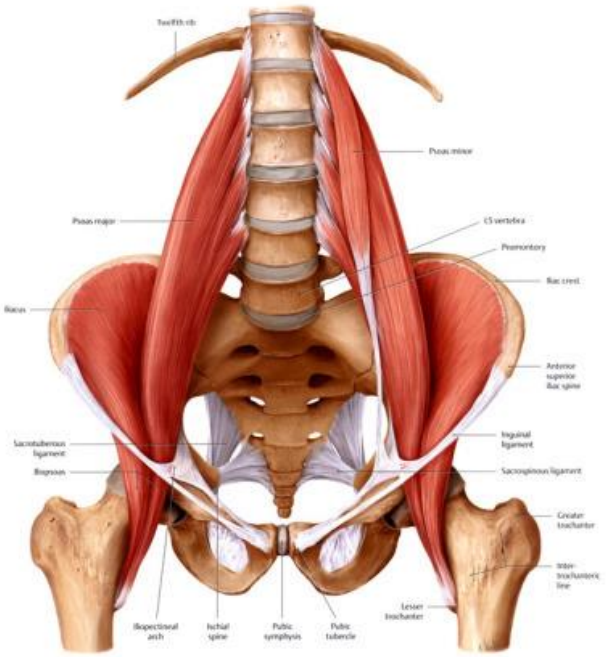
Imagine an enthusiastic horse bouncing along in trot or canter. Gravity & relaxation are not enough to keep you in the seat when the moving horse bounces you upward. When the horse reaches the downward part of his bounce gravity will pull you back down too but only once you've completed your upward trajectory - shortly after the horse stops pushing you up. This means you'll be catching up with the horse's back, coming down onto the horse's back as it starts to re-ascend, with a painful bump. Then he'll tense up, you'll tense up, we've all been there. Nasty. If you actually tried the bouncy hand exercise, you may have also discovered the urge to slow down to reduce bouncing. Or as we call it "lazy" or "behind the leg".

We the ambitious riders who'd like to own happy horses, want even more than a deep seat that stays on the horse, we want to control our muscle use so that we can move with the horse, even shift our pressure and tension and use it as an aid. No other sport attempts to reach this level of fitness, strength and coordination by just doing the sport. We need to release muscles we'd naturally tighten and tighten muscles we'd not normally use. We need exercises.

Step 2) Addressing the muscles

Iliopsoas: Psoas & iliacus.

The iliopsoas group of muscles is the deepest & arguably the most important part of your core. It's made up of the psoas major and iliacus. Most people can't be bothered to say iliopsoas, so they say psoas (the 'p' is silent) and mean the whole group, leaving others to get confused and starting to wonder if iliopsoas is yet another muscle. Don't let it bother you. Similarly some people get het up about psoas minor, but in bipeds (that's you) it's so small it's often absent, so functionally



it's not the place to focus. We'll worry about psoas minor when we talk about a [four-legged] quadruped.

Psoas (major) runs from the spine (lumbar vertebrae) to the inside of the femur (or thigh bone), so it flexes the hip and turns the leg out. Ditto iliacus, running from the pelvis to the same femoral attachment, having much the same effect. If you sit in a chair, car seat or anything that leaves you in that thighs up position for an hour or two, your iliopsoas shortens and contracts. So if you have or had a desk job rather than a sitting-on-horses job you're likely to have issues here. You may even be sleeping for hours every night in a lovely cosy foetal position - or worse, with one leg bent. I'm pretty good at guessing someone's sleeping position by looking at them on a horse.

If you contract your psoas sitting on a chair, you stay on the chair, albeit with back pain. If you contract your iliopsoas sitting on a horse, you end up with a forward-tilted pelvis, a hollow back (and a hollow horse), and a flexed and outward-turned hip. This means that you can't get the thigh down or the knees to turn in, because your hip flexors and rotators are jammed on, and to avoid tipping forward you'll try to sit up by hyperextending & bracing the back. You're working very hard co-contracting muscles to fight yourself but all you can get is tense, stiff and nasty. Your horse is actually being asked to hollow and you look like a frog.

Even within the very elite, Carl Hester for example has noticeably tighter iliopsoas muscles than his pupil Charlotte Dujardin and so has to work harder to get the same results.

If you're really unlucky you spend a lot of time sitting in a chair asymmetrically. If you pull more on just one psoas, just on one side, you bend the spine & hence trunk to that side, collapse that hip and are left wondering why you just can't sit straight on a horse.

If you want to be able to move synchronously with the horse so for example in walk your pelvis rocks side to side as your horse does, allowing him to use his back then you need to use your iliopsoas correctly, from a relaxed state.

The iliopsoas group are your most powerful hip flexors. If you've ever done knee ups or sit ups thinking you were strengthening your abdominals, chances are these are the muscles you were working. Good news is once you've released your iliopsoas muscles your abdominals and inner thigh will naturally strengthen as they'll actually have to do some of the day-to-day work themselves.

ironically most people's iliopsoas are both tight and weak, because they're not using the full range of movement. There are lots of exercises online for strengthening the iliopsoas/psoas. Don't do them. First we want to lengthen and release. There are a lot of yoga videos online on "psoas" release and most of these are very useful.

As the iliopsoas is so close to the diaphragm just breathing can help, and that's one of the reasons that breathing correctly has such an effect on your horse. Similarly if you tilt your pelvis posteriorly, as if you were trying to tuck your bottom under you and round

your lower back, your psoas will already start to stretch and you may feel any lower back pain ease.

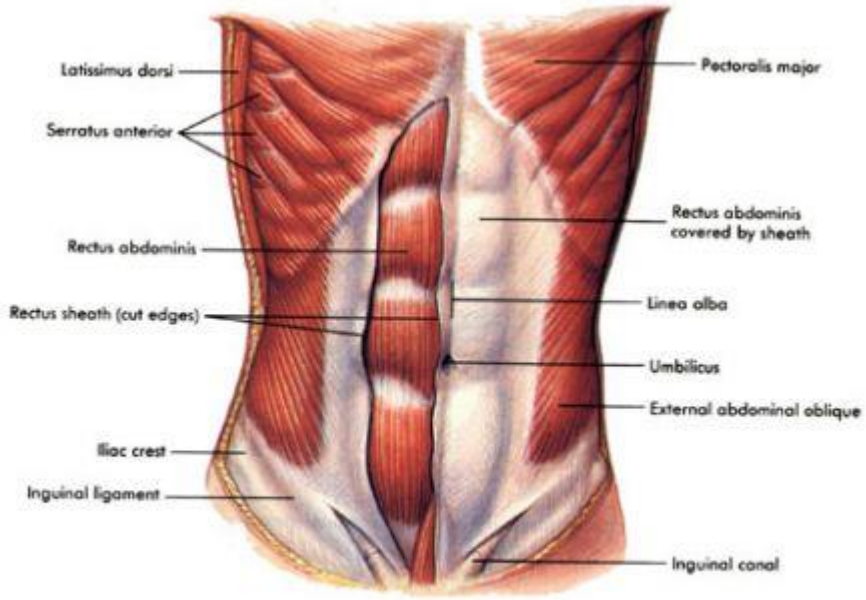
It's very hard to stretch a muscle before it's warmed up or contracted (despite older advice telling you to stretch before you start exercise) so the best way to start with your iliopsoas is to lie on your back, bring one bent knee up to your chest so that the hip flexors are really short and active. In that position hollow and round your lower back so that you can really target the muscles. Then slowly lengthen your leg out from there until it is flat on the floor and you've stretched as tall/long as you can be. Hold for a few seconds. Repeat this a few times on both sides, seeing if you can feel a longer stretch each time.

The second exercise to try is half kneeling and is a little similar to a lunge. Kneel on one knee with the other foot on the floor in front of you, as if you're going to propose. Then keeping your body upright try to push forward slightly onto your front leg opening your trailing hip to leave the bent leg behind you. This is close to the crescent lunge in yoga, and stretches the iliopsoas of the trailing leg.

With both exercises repeat 2-4 times both sides, 3 or 4 times a week or as needed.

There are plenty of variations of these and other exercises. It's ideal to just to think about where the muscle is, and just move in a way that stretches it within your own current ability.

Abdominals



The abdominal muscles get a lot of attention: they're right on the surface, make your clothes look good and more importantly for us they're certainly a big factor in making a rider effective. The effortless riders that seem to be doing nothing are using a lot of abdominal muscle strength. Go on, scroll back up to have another look at Charlotte, relaxed but certainly not passive, using a massive amount of abdominal tone to keep Valegro off his forehand and her own body in an effective position. This, along with the pelvic floor, is what is helping pull her down into the saddle even though her horse has pushed her up, and keeps her still so her aids are clear and hands independent.

The tricky part in trying to strengthen your abdominals is that many traditional exercises make it easy to cheat and just use your iliopsoas muscles, leaving you with even more back ache. We're already great at shortening the iliopsoas, and it's making us 'sucky' riders. So instead of sit ups and crunches let's engage core stability and make the abs work in a targeted, lengthened position. If you don't have a broken ankle you can start the infamous plank - on your hands and knees or hands and feet, as straight as you can as if you'd just completed a push up, but just hold it. Start with ten seconds or two minutes, whatever feels right. Tomorrow you can go ten seconds longer. It's important to stay within what feels comfortable as if you try to hold it for too long you're likely to

lose the straight back, neutral spine position, and won't be targeting the muscles as well as you could.

The second exercise to try is similarly starting on your hands and knees, straight back, knees directly below hips. Then lift one hand and one leg straight out and hold it. As with the horse's exercise the abdominals are working dynamically to keep you stable and balanced, making this a very effective exercise. Similarly if you lift one leg from the plank pose you'll add a lot of extra challenge to the exercise. In both cases don't forget to switch and work both sides!

Good news

The great thing about core muscles is that they are unusually quick to train, and not too hard to maintain. The hard part is just the getting started, and you should see results as quickly as the second week.

There is a little more to say about core strength and stability but as ever I've already gone on long enough and both family life & paid writing are calling, so I'll return to this topic in a Part 2. Worth mentioning though, that whilst I've used dressage pictures, the

core is particularly relevant to the showjumper as it is what keeps you in balance over a jump in a fold. If you struggle with getting ahead or behind your horse, over a jump or in any discipline, or getting him to engage or respond to your aids, a lack of core stability is usually to blame. Ditto ending up exhausted and out of breath when you ride. Often people are just tired because they've mostly been fighting themselves. But now we're going to fix that. Yey us.