

Horse Riding



There is a lot of skill required not only to ride, but to control and maintain authority on a horse. As with many animals which are associated closely with humans, horse can sense the state of their rider. Should a rider not be in control, due to muscular or cardiovascular fatigue, the ride can become dangerous for the horse and the rider alike.

MAINTAINING THE EQUILIBRIUM

Unless riding out of the saddle, contact between horse and rider is communicated through the pelvis. A mobile pelvis is required to match the movement of the horse and to absorb forces. The pelvis is a key area of the body, linking legs and torso but in horse riding an immobile pelvis that is unresponsive to the horse and may refer pain into the lower back more readily with the horse moving in 3 planes (forwards/backwards, up/down and side to side).



Due to the torso's position, being slightly hinged forward (flexed) at the hips breathing is also a key aspect of riding. In a slightly squashed position, lungs will not be able to fully expand as the thorax region will be compromised due to the slight forward bend. If breathing is compromised, limited oxygen supply to the working muscles will follow, leading to more rapid fatigue, meaning slower response times and less accurate control of the horse.

EQUICISE REQUIREMENTS!

Based on the information above, there are several key areas of fitness that are required for a clean, controlled and injury-free ride:

- Pelvic mobility
- Core stability
- Muscular endurance (especially legs, lower back and to a lesser extent, the shoulders)
- Cardiovascular endurance
- Effective breathing pattern
- Co-ordination
- Balance

You will find an interesting guide to the different elements of fitness for riding [here](#) and although there are a number of different riding activities, these are common across all areas.

Ultimately, pelvic mobility needs to track the horse's movements. To maintain contact, balance and centre of mass over the horse muscular endurance of the core is essential and needs to be consistent- a bracing effect achieved, without tiring that can cope with the stresses of torque (twisting forces) being absorbed by this area of the body. If this doesn't happen then the small movements received by the hips and core are translated into excessive movements that the thorax, arms, neck and head will find difficult to manage, without negative impacts and the onset of injury.

Maintaining a neutral spine for riding can be achieved by becoming more aware of the muscles that control pelvic tilt. Working pelvic muscles slowly will activate and isolate the specific region and allow muscle memory to begin (creating new/correct neurological pathways).

To support the conditioning of the core, balance exercises such as light dumb bell front raises whilst sat on a Swiss ball are great. These challenge the stabilising component of the core whilst working on muscular endurance of the arms.

Wobble boards or Bosu balls can be used to hone balance and an increase fun element can make a composite exercise...standing on a balance ball whilst squatting and having to catch a tennis ball (all at the same time).



Muscular endurance and cardiovascular endurance can both be improved by walking/jogging/cycling or swimming. We need muscles to repeatedly contract in the same range of movement, without getting tired (which would lead to unresponsive, slower contractions and possibly cramp). Cardiovascular endurance will ensure that enough oxygenated blood is being passed to the working muscles, so that enough energy is present for the muscular contractions to take place.

Finally, breathing patterns are key to not only to allow the blood to take the optimum amount of oxygen to the muscles but also getting oxygen to the brain, to allow for clarity of thought and quick reactions in a dynamic setting. To ensure the maximum amount of air enters the lungs it is important to breathe abdominally (not just in the chest). A simple test that can be carried out by everyone is the [Hi-Lo Test](#) which will indicate whether the individual has a predominantly chest or diaphragmatic breathing pattern.

Fitness for riding hides a number of elements that may be missed by the untrained eye!