

POSTERIOR CHAIN

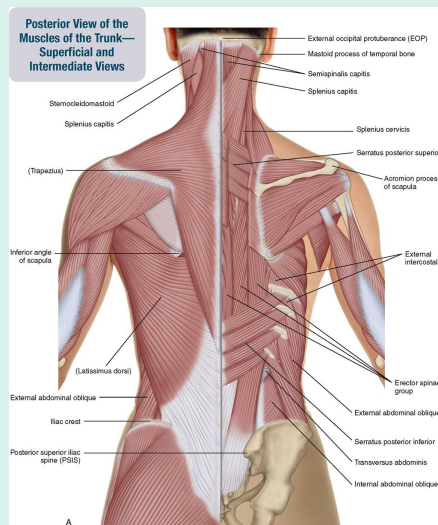
The **Posterior Chain** is the foundation of the body and is comprised of the muscles in the posterior aspect of the human body.

The posterior chain can be divided into two groups: the upper and lower posterior chain.

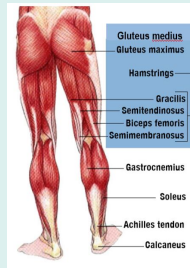
The **upper posterior chain** acts to maintain the trunk's upright position.

The **lower posterior chain** acts as the stabiliser for hip and lower limb alignment.

Upper Posterior Chain



Lower Posterior Chain



Kyphotic Changes

Over activation of the upper traps and the subsequent weakening of the lower traps and rhomboids can promote rounding of the shoulders.

This in turn forces the pectoral muscles to shorten and tighten. This combination of over-activation, weakness and tightness can lead to postural kyphosis.

Lordotic Changes

Lordotic changes often occur as a result of being quad dominant, which can be caused by being in a seated position for extended periods of time. Quad dominance forces the hips to be in flexion which then switches off the glutes and activates the hip flexors.

Over time, this causes strength in the glutes to diminish which can cause two problems:

(1) the spine is moved into a lordotic position by the hip flexors pulling the pelvis into anterior tilt due to lack of glute based hip extension.

(2) over activation of the hamstrings and lower back muscles to compensate for the lack of glute hip extension subsequently causing lower back pain.