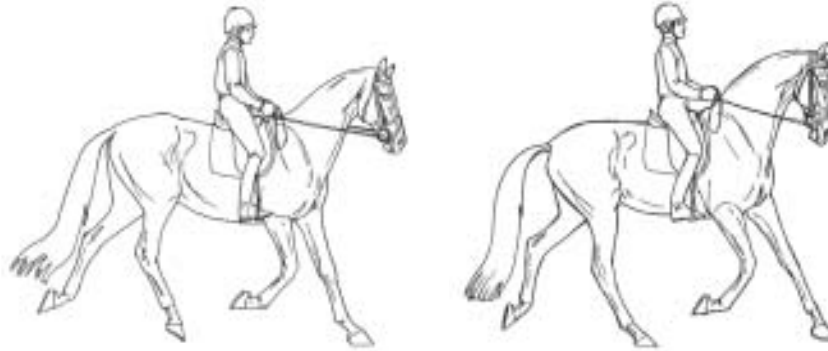


The Sling Muscles



On the forehead: The horse moves “down-hill,” with sinking between the scapulae.

“Uphill” movement: The horse’s withers are elevated between his front limbs. As a result, his hind hoof contacts the ground before his diagonal front hoof.

Sling Muscles

By Hillary Clayton, BVMS, PhD, MRCVS

Less well understood is the significant role played by the muscles in the upper part of the front limbs, which attach those limbs to the body. Tension in these muscles controls the height of the withers by suspending the trunk between the horse’s shoulder blades. A major anatomical difference between horses and humans is that the horse lacks a clavicle (collarbone). Your clavicle forms part of your shoulder girdle, which attaches your arms to your body. Without a clavicle, the horse has no bony connection between his front limbs and his trunk. Instead, strong muscles connect the inside of his shoulder blades to his rib cage and act like a sling to suspend the thorax between his two front limbs. Muscles that play a major role in this process include the serratus ventralis and the pectoral muscles. These muscles are referred to collectively as the “sling muscles.” When these sling muscles contract, the trunk and the withers are pulled upward between the horse’s shoulder blades, thus elevating the trunk and the withers relative to the croup. One goal of dressage training is to teach the horse to use his sling muscles to raise his withers and to maintain this raised position throughout the stride. Tone in the sling muscles increases with correct training. As a result, some horses grow taller at the withers in the first few months after starting work under saddle, as the sling muscles become stronger.

Taken from the USDF Connection September 2004 with the permission of Dr. Hillary Clayton for the Pony Club

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