cushioning disc the other way. Then the ■he human head weighs about 12 to nerves that come out of the spine at the sides may get pinched, especially if a rider has a lateral or side-to-side crookedness. From this you can get sciatica, general low back pain and postural distortion that may even affect your internal organs, as the nerves of the spine transmit impulses to the organs in the abdom-

inal cavity.

As a teacher of dressage for over 25 years, teaching the correct use of the rider's spine is, of course, essential. Even if we have lunge horses available to use to help students feel the balance, they still need to know how to translate this to their own horses, who most of the time have learned to adjust for the rider's imbalances and are carrying their crookednesses by being crooked.

The first step is a change of awareness - the head really counts. It's so easy to discount what our bodies do in cars, at computers and carrying things - it's awful to watch kids with big backpacks and chins jutting forward, because it is a path to spinal distortion at a very young age. Just as a horse, that at 7 years old has not come off the forehand and is already hard to correct, these kids as adults may have some health problems and pain as they

Incorrect use of the spine, is best corrected from the pelvis toward the neck. The same is true of horses. But if the neck of either human or horse is braced incorrectly, correction of the muscles must be made around our shoulders and ears and by the horse's shoulders and ears.

Training level students often ask me about flying changes and when can we

by Holly Mason

Gravity Determines Balance



Torso Straight

If you are truly balancing your skull on your spine, you can easily balance a book on your head. This alignment puts the ear, shoulder, elbow and hip in a direct alignment to the pulling force of gravity.

18 pounds. When used as a proper counter weight with the rest of the spine, it is unquestionably effective in transferring the source of locomotion to the hindquarters of the horse. If a rider is looking down or just disconnecting the top seven inches of the spine from the trunk of the body, you put your horse on the forehand. This is the theory, but in practice, this

may be one of the toughest faults to correct. The sternocleidomastoid muscle (SCM) attaches on the clavicle and sternum at one end and on the skull at the back of the ear. This muscle must stretch and become long to hold the head so the ear and the shoulder socket align.

Most people, who do not practice straightness throughout the day, tend to have long muscles at the back of the head and neck and short muscles in the front. After years of incorrect posture, off your horse, these muscles get "locked" in position. This accounts for the "head bopping" we see in the sitting trot at shows and all around us.

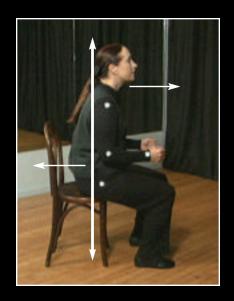
As one examines the effect down the spine, a slightly forward head usually rounds the shoulders. If you sit very straight and then let the head go forward (a position that is prevalent at computers) the shoulders will move forward. This also causes the latissimus dorsi to soften and the whole curve of the spine starts to change and that changes the angle of the pelvis.

Our backs are meant to have several curves that allow the discs between the vertebrae to act as cushions against gravity. When the vertebrae are not level, all kinds of calcification/arthritis can start at the edges of the vertebrae where the bone has pushed the start (a frequently heard request...) - the answer is lateral work - leg yielding, shoulder-in, haunches-in. Quick and agile spinal flexibility is how correct flying changes are built. The rib cage on which we sit and control with our legs & back is key to a horse's whole spine being able to bend and flex in the gentle curves of lateral work.

I read all these discussions about "working deep" and see that this is one way of reaching and controlling the horse's rib cage - providing a compressed curve on one side, and most importantly, a stretch to the outside of the horse's body - the base of the neck, the lower abdominals ahead of the stifle, the outer hip and the hamstrings. All these areas get tight from any collected/connected work and need to be stretched.

So train your eye to see how the beginning of all this can easily be the head and neck of the human. I use the term "dynamic tension" to describe the essential isometric stretching of the torso. "Tension" actually means to elongate and the word "dynamic" describes the forms of motion in physics. So one must stretch and yet move with the horse in a dynamic tension.

Our bodies are designed to defy gravity.





Torso Collapsed

Torso Tipped

When we allow our torsos to be pulled forward, our vertebrae don't come down on the discs properly and can cause damage to the back in any number of ways. This also causes our muscles to develop incorrectly for stability in moving through space, either on horse back or on our own feet.

A rounded shoulder stance with chin forward, changes the angle of the pelvis, so that an effective seat is not possible. A tipping forward of the upper body (except in jumping) shifts the bulk of our weight forward and puts the horse on the forehand.

The Dance Connection

The stretching, however, comes first as any athlete knows. In dance, generally, but especially in partnering, the dancer who is about to be lifted must be stretched and lifted, so that they become one unit for the other dancer to lift. If they are not lifted or only partially lifted the dancer's weight becomes more of a "dead weight", i.e. unconnected, so the lift will fail, or not be very high, or the lifter might be injured.

For horses to move fluidly under us, we must lift in dynamic tension so that we allow the motion in their backs. Even the smallest rider on a very big horse can, with a sloppy head and slightly mushy posture, very effectively keep the horse's back from moving well. The slight tipping forward of such a position also puts weight on the horse's shoulders and the base of the neck - the horse's back, especially behind the saddle, then moves less and less.

Experiment with how powerful the correct alignment of your head is and how it can change your horse's motion. Many different kinds of lateral work will create more flexibility in your horse. Better posture is the place to start - on your horse and off.



Dynamic Tension

- A Contract the Abdominals
 B Engage the Back with the muscles under the shoulder blades.
- C Keep the Chin in and stretch up the back of the neck

The goal is to stretch the muscles in the front of the torso, as well as the back and all the way up the neck, to hold the upper body in an erect counter balancing position that is neither rigid nor sloppy.

Taller, Thinner, Younger.

If it looks good, it is good (to paraphrase Duke Ellington's "If it sounds good, it is good"). Carrying yourself in a stretched, effective way makes an elegant, youthful and graceful presentation that helps your horse perform well and enjoy the work.