**Dr. Mark Saracino** Board Certified Chiropractic Neurologist 1150 First Avenue, Suite 120 King of Prussia PA 19406-1341 610 337 3335 voice 610 337 4858 fax Mark.Saracino1@juno.com DrSaracino.com

## How Can One's Back Suddenly "Go Out?"

Innocent movements such as reaching overhead, stepping off a curb, bending to tie a shoe or vacuuming can trigger severe low-back pain (LBP) because the underlining causes were long-standing!

The subtle acts that cause LBP are, really, the "final straw"! Years of spinal abuse predispose one to back injuries. Excess body weight, poor sitting and standing postures, stress, and flaccid back extension (spinal erectors) and abdominal muscles greatly increase our chances of sudden, seemingly, unprovoked LBP because they destabilize the spine. The excess tension on the spine caused by these maladies is ongoing. It can stress the spine beyond its means to a break-point causing spasm and pain. The predisposing factors mentioned here are, most times, more important that the actual movement that started the pain.

## Can This Injury Be Prevented?

Yes. Excess body weight and abdominal flaccidity cause the abdomen to protrude. This changes the weight-bearing center-of-gravity, forcing the low back's forward curve (lordosis) to increase. The normal "architecture" is altered, jamming the facets (as in "facet syndrome") together. Even sitting properly creates a four-fold increase in backward pressure on our vertebral discs; imagine the damage that can occur from just *poor* sitting!

Vacuuming seems not very challenging to the low spine, but it <u>combines bending</u> with twisting of the trunk-- the worst combination of movements for the low back. Many know that straight bending of the trunk without help from the knees is the most common cause of LBP.

Better standing posture can be attained by imagining you are a puppet dangling from a string attached to the top of your head (vertex). Allow the string to pull upward while keeping the chin tucked. Now, pull your shoulders down toward the floor (never pull the shoulders back). You will feel tension draining from muscles that originate on the back of the head (and insert onto the top of the shoulders) as they stretch to length. This exercise in ballet is called "finding your center" and should be practiced daily. This simple technique performed daily with other morning stretches while driving or sitting at the computer and during our stressful hours will not only decrease the chances of contracting neck and LBP, but provide greater ease in breathing as well, because the front of the rib cage then elevates and provides better ventilation. Many know that strong abdominal muscles lend support to the low back, but are unaware that the <u>back extenders (spinal erectors) should be twice as strong as</u> <u>the abs</u>. Too much emphasis has been placed on doing crunches (not a comfortable or efficient way to strengthen the abdominal muscles) and not enough on the very muscles that hold out trunks erect. The best way to strengthen the muscles in the front of the trunk is with "cable exercises" in a gym, and the best way to strengthen the spinal erecters is with experienced supervision while performing an abbreviated version of a trunk-bending exercise dead lift. Do not attempt to perform these tasks on your own. I can carefully and safely guide you through in the rehabilitation area in my office.

Only after the initial phase of therapy, whose goals are to eliminate pain, swelling and spasm, can the secondary phase of therapy, whose goals are to stretch and strengthen, can begin. No better treatment for the back has been found than the combination of massage, spinal manipulations, physical therapy and spinal decompression.

In Health,

Mark Saracino, DC, DACAN Diplomat American Chiropractic Academy of Neurology