

Strong Spines Make for Better Health

By: Ken Spresser, D.C.

Published in the Denver Medical Journal in January 1993

When someone says “spine,” most people think of bones. But the 24 vertebrae that make up your spine are actually armor plating for the spinal cord which - along with the brain, nerves and nerve roots- constitute the body’s nervous system.

The Spine is commonly divided into three sections. The *neck*, or cervical spine, is made up of seven vertebrae which curve forward into a smooth, flexible C-shape. The *middle back*, or thoracic spine, contains 12 bones, and is the least flexible section, primarily because the rib bones are attached to it. The middle back also curves, but in the opposite direction of the neck. The *lower back*, known as the lumbar spine, is made up of five vertebrae that also curve forward, with the sacrum forming a stable curve in the opposite direction. The lower back supports the entire upper body, enduring more physical stress than the rest of the spine.

In addition to supporting the weight of the upright body, the spine is uniquely designed to protect the spinal cord and nerves. The cord, which is the main communication line from the brain, runs through an opening in the center of the vertebra. There are opening on the sides of every vertebra through which nerve roots exit the spinal cord, reaching out to transmit messages sent by the brain to the rest of the body.

Because this spinal column has to be flexible enough to allowing twisting, bending and stretching, and because of most people do these things repeatedly throughout the day, chances are great and that one or more vertebrae might twist, torque or slide out of place. In the chiropractic profession, these spinal misalignments are called *subluxations*.

Subluxations most frequently occur when you misuse or overuse any part of the spine. Sudden stops or blows, sports injuries, pregnancy – and especially poor posture – are all common causes of vertebral misalignments. Birth itself can cause spinal problems that can prevent the spinal cord from transmitting messages from the brain.

Sometimes subluxations cause back pain. These are easy to diagnose. “Locked” spinal facets (joints between the vertebrae), sprained ligaments, strained muscles and bulging or ruptured discs can all cause subluxations, back pain and various degrees of nervous system malfunction.

Other times, subluxations cause no back pain at all, but still interfere with the ability of the spine to adequately transmit messages constantly sent by the brain to every portion of the body. This can cause discomfort, illness or disease in nearly any organ. That is why chiropractic adjustments for back pain frequently clear up digestive problems, headaches, menstrual cramps, and many other illnesses contracted when subluxation prevents the body from operating optimally.

As human beings, our upright position and active existence make complete prevention of subluxations impossible. But good spinal care can prevent spinal degeneration and limit the severity of misalignments. The following tips can help you:

- Bend your knees every time you lift something, keeping your back straight and feet apart. Use leg muscles to lift, not your back.
- Sit with feet flat on the floor in a chair that supports the curve in your back and neck. Keep work at eye level. Take frequent breaks.
- Sleep on your back on a firm mattress, with pillows under your knees, head, and shoulders, and rolls under your low back and neck. Avoid sleeping on your stomach, particularly on a soft mattress.

In addition, try doing the following exercises 10 times each, three times a day, while sitting at your desk:

- Extend and flex the spine while sitting with hands on knees. First arch your back and then slowly slump forward.
- Do side bends while holding your hands together at chest level. Bend at the waist, tilting as far to each side as possible.
- While in the same position, gently twist at the waist. Rotate your head and neck to the same side.

Since stress and poor nutrition can also lead to misalignment, learn to manage the stress that life dishes up and eat properly.

It may sound simplistic, but keeping the spine properly aligned through regular chiropractic adjustments and appropriate posture, exercise, and nutrition can have an enormous impact on the health of your entire body.

Ken Spresser, D.C., has practiced chiropractic in Arvada for the past seven years. He owns Indian Tree Chiropractic and specializes in trauma patients. He is a member of the Colorado Chiropractic Association.