

## Flexion Stress on the Spine:

### Neck, Shoulders, and Upper Back

Remember when you were young and your mother always told you to sit up straight? Well turns out she was a pretty wise woman. The stress of flexion (or slumping) can be the root cause of neck pain, shoulder pain, and upper back pain for many people.

When we start school at 7 or 8 years old, we basically begin the process of stressing our necks and upper backs by sitting all day, working on our desks, head down and shoulders forward. And we continue this for the next 12 to 16 years or more with our schooling. And then what? Well we join the workforce and continue to sit all day, working at a desk, on a computer, head down and shoulders forward.

Our bodies are not designed to function this way. Our bodies are designed to be upright. Our bodies are designed to move. Unfortunately, for many of us, we do neither enough. We have become sedentary. We spend too much time sitting: at our desks, in our cars, in our homes.

The body adapts to stresses put upon it. If we are constantly putting our bodies in a flexed position, the body adapts to that. How? By muscle splinting—the muscles around the flexed spine will tighten, trying to prevent further flexion, trying to pull you back into a more upright position. But, if we continue to load the spine like this day after day, year after year, the body eventually adapts to this positioning, no longer able to extend fully. These are the people you see with their heads forward on the neck, shoulders rounding forward, the upper back curve increased, muscles spastic and tight, joints stiff. Neck pain, shoulder pain, upper back pain.

Exercise for people suffering from these symptoms should be focused on increasing spinal extension range of movement in the mid and upper backs, improving the strength and endurance of the back extensor muscles, retraining the shoulder blades into retraction down the spine, and stretching the spastic neck and chest muscles.

Exercises that may worsen the condition are those that promote increased flexion including heavy chest and anterior deltoid training, excessive crunches for the abdomen, and forward spinal bending.