



# ERGONOMICS

October

2008

## Topic of the month: WORKING IN NEUTRAL POSTURE

How many of you use rubber bands on the mail on a daily basis? If you were to use the same rubber band everyday for weeks on end, what would happen to that rubber band? If you could look at that rubber band under a microscope or a good magnifying glass, you would probably see that with repeated use tiny tears start to develop. As time goes on, those tears increase in number and size, until the strength of the rubber band is compromised. Additionally, over time the rubber band gradually becomes more brittle and loses its elasticity.

Why are we talking to you about rubber bands? Because in many ways, your body's soft tissue is much like the rubber band described above. Repeated wear on soft tissue such as spinal discs can cause small tears that become worse over time. You may be able to continue doing the same activity for some time; but if you continue to stress that area, without adequate time to recover, your body may reach the breaking point much like the rubber band. And just like the rubber band, our spinal discs and other soft tissue become less pliable and more brittle with age, putting us at increased risk of injury.

Have you been snapped by broken rubber bands enough that you are careful about the way that you stretch them around mail, in order to avoid a break? Think of your body in the same way! Don't wait until after you "snap" to be careful about bending, twisting and awkward postures.

Neutral posture is the optimal positioning of each joint that results in the most strength, the most control over movements, the best mechanical advantage, and the least physical stress on joints and the surrounding tissue. Whenever possible work in neutral posture.

- Bending forward or otherwise flattening the slight sway back puts pressure on the sensitive discs of the lower back. This can lead to severe back injury
- More stress is placed on the spinal discs when lifting, lowering, or handling objects with the back bent or twisted, compared with when the back is straight.
- There is no one single best posture that should be maintained for the entire day.
- Neutral posture is the back in its natural "S" curve, the neck in its proper alignment, the elbows held naturally at the sides of the body, shoulders relaxed, and the wrists in line with the forearm.

**BOTTOM LINE:**

Can you always work in neutral posture? No, but where you can, you should.

**Ergonomic Principles**

**Work in neutral postures**

- Reduce unnecessary force
- Keep things in easy reach
- Work at proper heights
- Reduce repetitive motions
- Minimize Strain and Fatigue
- Minimize pressure points
- Provide clearance
- Move, exercise, and stretch
- Know your environment

**Nutritional Factoids**

Fast food chicken is not always a great deal healthier than a burger meal. Get grilled, not crispy chicken to improve nutritional value a bit.

**¼ lb burger with cheese;**

- 740 calories
- 42 grams of fat
- 40 grams of carbs

**Crispy chicken club**

- 660 calories
- 28 grams of fat
- 63 grams of carbs

**Over the Shoulder:** Sit in neutral position. Grasp your right elbow with your left hand in front of your chest. Inhale. Exhale and hold your right elbow towards your left shoulder until you feel a slight stretch. Inhale. Exhale and slowly turn your head over your left shoulder. Hold for fifteen seconds, continuing to breathe. Relax and return to neutral. Repeat with your left elbow, assisting with your right hand. This stretches the muscles of the shoulders, back, upper arms and neck, increases circulation in shoulders, back and neck.