## **Ergonomics**

"Ergonomics" is a fancy word to refer to fitting the environment or work tools to the worker so as not to cause undo stress or strain in performing work operations. There are no hard-fast rules that apply to everyone, but there are well documented and consistent guidelines. People come in many different sizes (height and weight), gender, and physical condition. What is "right" for one person may not be exactly right for the next. Maintaining the same position for prolonged periods of time or performing repetitive motions frequently are not healthy. Likewise, not all products labeled "ergonomic" are truly well designed products that are good for you (similar to deceptive advertising/labeling of nutritional products that say "low fat"!).

Here are a few basic tips on "good ergonomics" for the average employee who works at a desk with a computer:

- If seated in a desk chair (task chair), adjust the seat height so that while you can comfortably rest your feet flat on the floor, your thighs are parallel to the floor. This is the first adjustment to be made before other adjustments to your chair or keyboard location.
- You should be able to easily sit all the way back in your desk chair (task chair) to support your back, while being able to place your four fingers (index to pinky finger as a measuring guide) between the back of your knee and the front edge of your chair.
- You should maintain a minimum 90 degree angle OR MORE between your thighs and upper torso in order to maintain good blood circulation. Do not slump forward towards the monitor with a less than 90 degree angle.
- Adjust the desk chair (task chair) arm rest height so that you can very gently support your elbows. You do
  not want the height of the arm rests to be "lifting" your elbows such that you are "shrugging" your shoulders.
- You should maintain a "neutral" angle between your forearms and fingers while typing on the computer keyboard. In order to accomplish the "neutral" angle (straight line forearm to wrist) you should be able to adjust the location of your computer keyboard. You should also be able to reach your mouse (input devise) without reaching outside of your "neutral zone".
- You should be able to view your computer monitor with a straight line of sight (not angled) that is straight ahead or slightly downward. Adjustments are necessary for those needing to wear bi-focal lenses to prevent neck strain.
- You should be positioned about arms reach from your computer monitor. Most people sit too close to the monitor!
- You should not maintain a static position throughout your work day. Movement is good for you!

There are many good references to further define ergonomics at the following sites if you would like to learn more about the topic; however, be aware that like any topic there is also much misinformation available too, so be careful of generalized internet searches on the topic. There are many companies out to sell products, rather than to simply provide information.

If you have further questions or concerns about specific medical issues, please consult your individual physicians. If you have generalized ergonomic issues with your work areas, please contact Kris Willis to meet and discuss.

## Recommended Additional Reading:

Crenshaw, Ronda. "Ergonomics 102: Creating a Healthy Workstation". Interiors & Sources, October 2004. (also available online at <a href="http://www.interiorsandsources.com/Magazine/2004/oct/ergonomics.html">http://www.interiorsandsources.com/Magazine/2004/oct/ergonomics.html</a>)

"Ergonomic Guidelines", International Programming & Systems, Inc. Online <a href="http://www.ipsamerica.com/html/ergonomic.html">http://www.ipsamerica.com/html/ergonomic.html</a>, February 2006.

"Ergo Info", Human Scale. Online http://www.humanscale.com/ergo\_info/index.cfm, February 2006.