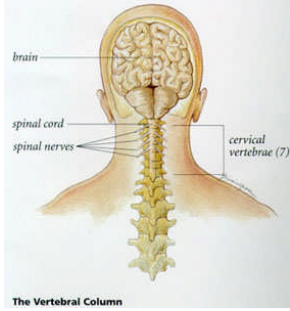


***Physical Symptoms & Solutions***

SYMPTOM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
<p><b>HEAD AND NECK DISCOMFORT</b></p>  <p>The diagram shows a posterior view of the human head and neck. Labels include: 'brain' at the top, 'spinal cord' running down the center, 'spinal nerves' branching from the sides, and 'cervical vertebrae (7)' at the base of the skull. Below the diagram is the caption 'The Vertebral Column'.</p>	<ul style="list-style-type: none"> <li>● Poor posture habits</li> <li>● Prolonged monitor viewing</li> <li>● Muscle tension</li> <li>● Incorrect chair height</li> <li>● Constrained head posture to view monitor or source document.</li> </ul>	<ul style="list-style-type: none"> <li>● Place monitor screen so that top of screen is lower than eye level, 40 to 60°.</li> <li>● Note: Screen should be much lower for bifocal users.</li> <li>● Remove CPU from under the monitor.</li> <li>● Place source documents at the same height and tilt as the monitor.</li> <li>● Monitor and document holder arrangement are determined by the tasks performed:             <ul style="list-style-type: none"> <li>- for data input from hard copy, the document holder should be in front of the user and screen to the side.</li> <li>- For editing from the monitor or correcting documents on it, the monitor should be in front of the keyboard and the document holder to the side.</li> </ul> </li> <li>● Place frequently used items closer to you.</li> <li>● Use headset instead of phone receiver if there is a need to write or use the computer while on the phone, or when using the phone for a long period of time.</li> <li>● Alternate tasks throughout the day.</li> <li>● Do periodic neck and shoulder exercises and stretches.</li> </ul>

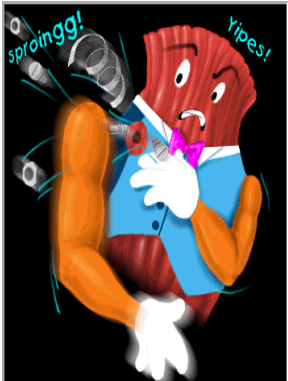


*Physical Symptoms & Solutions*

SYMPTOM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
ARM, HAND, OR WRIST DISCOMFORT	<ul style="list-style-type: none"><li>● Incorrect keyboard height</li><li>● High volume key stroking</li><li>● Working with wrists bent.</li><li>● Tensing fingers muscles</li><li>● Prolonged static arm/hand/wrist positioning</li><li>● Poor arrangement of work materials.</li><li>● Work surface not adjusted to your height or does not offer comfortable surface.</li><li>● Using forceful pressure when keying</li><li>● Using telephone in a crunch position.</li></ul>	<ul style="list-style-type: none"><li>● Adjust key height so that elbows are at approximately 90 degrees angle, with the forearms and wrists in a straight line when keying.</li><li>● Alternate non-key tasks throughout the workday.</li><li>● Use wrists rest to keep wrists straight.</li><li>● Reduce excessive force on keys and avoid lifting heavy documents or reference material.</li><li>● Arrange equipment so they may be used with wrists and forearms straight.</li><li>● Use neutral posture at workstation and keyboard use.</li><li>● Do periodic arm/hand/wrist exercise and stretches.</li></ul>



*Physical Symptoms & Solutions*

SYMPTOM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
<p><b>SHOULDER DISCOMFORT</b></p> 	<ul style="list-style-type: none"> <li>● Keyboard too high</li> <li>● Worksurfaces too high</li> <li>● Monitor too far away</li> <li>● Awkward reaches</li> <li>● Tensing of upper arm muscles.</li> <li>● Incorrect chair height</li> <li>● Prolonged static hand/arm positioning.</li> </ul>	<ul style="list-style-type: none"> <li>● Adjust keyboard height so that elbows are at approximately 90 degree angle, with forearm and wrists in a straight line when keying.</li> <li>● Alter chair or work surface height so that work surface is at seated elbow height.</li> <li>● Place monitor screen at least 18 to 24 inches away from eyes.</li> <li>● Place monitor screen at a 40 to 60° angle from eyes. You must read down.</li> <li>● Arrange your work materials to be within easy reach without over extending body posture.</li> <li>● Alternate work tasks throughout the day.</li> <li>● Do periodic neck/shoulder/arm exercises and stretches.</li> </ul>



**Physical Symptoms & Solutions**

SYMPTOM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
<p><b>BACK DISCOMFORT</b></p>	<ul style="list-style-type: none"> <li>● Poor posture habits</li> <li>● Lack of lumbar support</li> <li>● Feet dangling, not supported (therefore major thigh muscle is pulling on the spine).</li> <li>● Leaning forward (called shoulder abduction) in chair with thigh/trunk angles less than 90° degrees increasing disc pressure and stretching the muscle, tendon and ligament system.</li> <li>● Twisting from chair, no use of swivel feature.</li> <li>● Sitting without intermittent breaks or microbreaks.</li> <li>● Reaching and lifting heavy items from overhead shelves (especially harmful if torso is twisted at the same time).</li> </ul>	<ul style="list-style-type: none"> <li>● Set screen viewing distance to eliminate need to lean forward.</li> <li>● Use chair with lumbar support or use chair insert to achieve support.</li> <li>● Adjust chair back height so that lumbar curvature provides support in the lumbar region.</li> <li>● Open thigh/trunk angle to 90 degrees or greater when seated (thighs should be parallel to the floor).</li> <li>● Use swivel feature of chair , do not twist body to work.</li> </ul>



*Physical Symptoms & Solutions*

SYMPTOM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
<p>HIP PAIN</p> <p>BUTTOCK DISCOMFORT</p> <p>LEG PAIN</p> <p>FOOT CRAMPS</p>	<ul style="list-style-type: none"> <li>● Incorrect chair height</li> <li>● Pressure behind knees from edge of seat</li> <li>● Sitting at chair edge</li> <li>● Feet dandgling, not supported.</li> <li>● Infrequent posture changes</li> </ul>	<ul style="list-style-type: none"> <li>● Set chair to correct height, neutral posture (thighs parallel to floor, with feet supported by floor or footrest)</li> <li>● Use a well designed footrest (with inclined, nonskid surface).</li> <li>● Move forward on chair seat-pan bringing backrest forward (open space behind knees to improve blood circulation)</li> <li>● Use backrest to support back, do not lean forward to perform tasks without having back supported.</li> <li>● Check leg clearance underneath work surfaces. Remember to move legs and feet when seated and frequently change your body position in chair.</li> <li>● Alternate non-sitting tasks and take short walks during breaks.</li> <li>● Do periodic stretches.</li> </ul>



**Physical Symptoms and Solutions**

SYMPTOM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
<p>EYE FATIGUE</p> <p>BLURRED VISION</p> <p>ITCHING, IRRITATED OR SORE EYES</p>	<ul style="list-style-type: none"> <li>● Inadequate monitor contrast</li> <li>● Glare reflections on screen</li> <li>● Inadequate lighting</li> <li>● Incorrect viewing distances</li> <li>● Prolonged screen viewing</li> <li>● Poor arrangement of work material</li> <li>● Stress</li> <li>● Red eye syndrome, not enough blinking</li> <li>● Incorrected vision problems</li> <li>● Contacts lenses, bi-focals, dryness.</li> <li>● Flickering of images on monitor</li> </ul>	<ul style="list-style-type: none"> <li>● Reduce glare on screen by :               <ul style="list-style-type: none"> <li>- covering windows</li> <li>- positioning face of monitor at right angles to window &amp; light sources.</li> <li>- Using anti-glare filters (only if really necessary, these glare filters do not tend to work well)</li> </ul> </li> <li>● Use task light for visually demanding work</li> <li>● Position monitor 18 to 24 inches from eyes.</li> <li>● Alternate non-computer tasks throughout the day.</li> <li>● Position source document at the same height and tilt as the screen.</li> <li>● Have regular eye exams</li> <li>● Use eye-glasses in lieu of contacts lenses.</li> <li>● For bi-focals users, purchase second pair of eyewear for computer use only.</li> <li>● Request monitor screen be serviced if images are flickering</li> </ul>



**exercise on opposite side.**

