

## POSTURAL TIPS FOR AVOIDING MUSCLE AND JOINT PAIN: PART 1

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Good posture can be defined as the body's ability to maintain an efficient, strong, and balanced position while interacting and adapting to our physical environment. Good postural habits can help decrease abnormal and excessive stress on biological structures such as muscles, joints and nerves, thereby minimizing the chance of injury. Chronic poor posture can lead to symptoms such as muscle and joint stiffness, nerve pain, headaches, neck pain, upper back and low back pain.

Some people feel the effects of poor posture immediately. While for others, the effects of poor posture are offset by the body's ability to compensate. However, this compensation is not necessarily good. Compensation leads to secondary muscle recruitment and unbalanced movement patterns and joint mechanics that are usually less ideal and not as efficient. Even in the absence of pain, these compensatory changes may begin a vicious cycle of unbalanced motion – causing muscle and joint stress – causing more unbalanced motion – and frequently secondary areas of discomfort and pain. The compensatory changes in muscle and joints resulting from poor postural habits can cause real physical change and breakdown in the body.

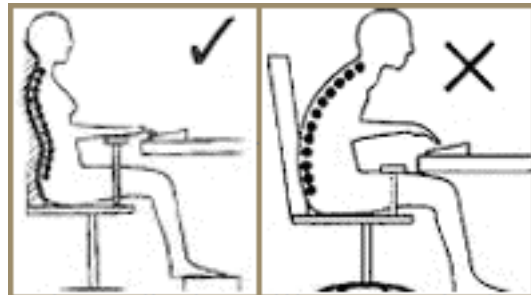
It is important to identify some of the common everyday activities that can lead to poor postural habits and the things that be done to minimize the chance of injury:

- 1. Be careful with prolonged sitting positions:** People that sit for prolonged periods of time may adopt a poor posture that includes losing the natural hollow of the low back, rounding or slouching of the upper back and shoulders, and a forward head poking position. These less than ideal positions put cumulative stretch and compressive stress on biological tissues and can lead to significant pain symptoms.

There are several measures that can be taken to overcome the effects of prolonged sitting positions. Be sure to take stretch or posture breaks (minimum 10 to 30 seconds in duration), every 20 to 40 minutes, that allow you to stand, walk around and stretch out your legs and upper body. Also make sure that your weight is evenly distributed on your seat, your shoulders are not rounding forward, and you are not slouching. Your head should be resting on your torso and not poking forward. The use of a lumbar support can help maintain the natural hollow (lordosis) of your low back and preserve proper posture.

- 2. Consider ergonomics when performing activities:**

Quite often, people make it more difficult to employ ideal postural positions because of poor workstation design or use of inadequate equipment and tools. Picture an individual sitting in front of a computer with the monitor off to their left and their keyboard six inches too high because their non-adjustable seat does not allow them to rise up to the level of the desk. Over time, the muscles in this person's low back, upper back, neck, wrists and elbows will become fatigued and achy due to the lack of balance, alignment, and efficiency of their posture. The use



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of proper equipment, ergonomic tools and assistive devices when performing tasks can help maintain mechanically advantageous positions while working.

- 3. Avoid working in stooped positions for long periods of time:** When the natural hollow of your low back is maintained, the stresses on biological tissues in your low back are considerably lower than when your back is bent forward. This natural and neutral curve of your low back is important, as this is its strongest and most secure position.



Many activities around the home and workplace cause you to bend forward or stoop. While working in these forward bent positions, you are more likely to sustain back problems, especially in the first several hours of the day. In order to minimize risk of injury, you should interrupt the stooped position at regular intervals before pain starts. Standing upright and bending backward five or six times can be helpful. Trying to find alternative ways of completing tasks without stooping is ideal.

- 4. Engage in regular physical activity and exercise:** Regular physical exercise increases our functional capacity to withstand occupational, recreational, and everyday stresses to our body more efficiently, thereby minimizing the risk of muscle and joint injury. Exercise strengthens our muscles and joints, while inactivity and poor posture weakens them. Joint problems and stiffness usually mean that the joints are not being moved in a full, normal range of motion. Regular exercise consisting of cardiovascular, resistance, and flexibility exercises help strengthen our bodies and can help combat the negative effects of poor posture.

The way we interact with our surroundings has a profound ability to affect our physical health. Employing the strategies listed above can be helpful in minimizing the risk of developing muscle and joint stiffness, nerve pain, headaches, neck pain, upper back and low back pain related to chronic postural strain. Chiropractors are well positioned to effectively evaluate and treat the effects of common muscle and joint injuries related to poor posture. This may include symptomatic treatment, the prescription of appropriate stretching and strengthening exercises, or valuable ergonomic advice on proper sitting and work postures specifically for your circumstance. For more information visit [www.nhwc.ca](http://www.nhwc.ca).

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