

The Back Pain Epidemic

When it comes to your job and missing work, what are the main reasons people miss work? According to University of North Carolina's School of Medicine, the second most health related reason for missing work would be back pain, with the first being the common cold (Lane, 2009). This study also found the prevalence of back pain is steadily on the rise for both genders as well as all ethnicities. Back pain is not something to take lightly, as the effects can potentially be catastrophic. It may mean you miss more days at work, or even the possibility of losing your job due to inability to perform your work duties. Not to mention the pain and difficulty with performing normal activities of daily living such as cleaning your house or shopping for groceries. The total cost of chronic back pain is catastrophic in America: over 100 billion dollars annually. As the incidence and cost of treating back pain continues to rise, an increasing emphasis needs to be placed on prevention and management of back pain. This article will provide some reasons that back pain is increasing, as well as some strategies to help reduce and prevent back pain.

When most people think about someone with back pain, they often think of an individual that is older and relatively inactive. However, this is often not the case. One study found that about one fourth of adults under the age of 65 reported lower back pain within a three month period (Deyo, 2006). Taking age out as one of the factors contributing to back pain, what are some other possible causes? Many studies have shown that a person's sitting posture has a huge effect on whether or not they develop chronic back pain. Most people tend to slouch when sitting (car, computer, couch). This slouched position puts the lumbar spine (low back) in a chronically flexed position. Having your back in a flexed position for most of the day can lead to a variety of musculoskeletal adaptations. One of these adaptations is the lumbar spine can lose its normal inward (lordotic curve). Also, the head and shoulders can shift forward in relation to the rest of the body. Additionally, lumbar flexion tends to generate physiologic forces that push the lumbar disk posteriorly. This evidence is supported by the fact that most disc injuries (bulges, herniations) tend to occur in a posterior or posterior/lateral position. As a result, you become more likely to develop back pain.

In the past, poor sitting posture may not have been as important of contributing factor in the genesis of back pain as it is now. Historically, people have worked in jobs that were physically demanding, and did not involve a lot of sitting. However, the changing nature of our country's workforce from being more farming and manufacturing to service industry/desk jobs has created a society that sits for a living. Along with having a sedentary job, improvements in technology have also greatly contributed to an increased lifestyle of sitting. Instead of going outside to "play", we now spend endless hours watching television, surfing the web, and playing the newest computer/video games. All of these non-active recreational activities contribute more to a sedentary lifestyle of sitting. Unfortunately, if you are one of the millions of Americans that sit for a living and you also sit for fun, then you are at increased risk for developing back pain in the present, as well as down the road.

For most people, it is not a question of if they will get back pain, but a question of when. Currently, about 80% of Americans will experience back pain at some point in their lifetime (Lane, 2009).

The important question to ask is “what can I do to help prevent or reduce my chances of developing back pain?” Most people think that developing and maintain a strong core, i.e. “core stability” is the key to reducing and preventing low back pain. However, if “core stability” is the answer, then why is it that bodybuilders with amazingly strong cores also get back pain? A recent study seems to support the idea that core stability is more of a myth than the answer for low back pain (Cairns 2006). In addition, another article (Rackwitz 2006) offers more evidence that segmental stabilizing exercises that work the core of your body are not effective for relieving and treating back pain.

You may now be wondering what you can do to help reduce your chances of getting back pain. Fortunately, there are several strategies that you can easily incorporate into your lifestyle. Simply adding a support (lumbar roll, small pillow, rolled towel) for your low back when sitting can help keep the low back in extension. This strategy will help your lumbar spine maintain its normal lordotic curve and help prevent a flexed or slouched posture. This one simple strategy alone may be the most important means of preventing and reducing back pain. Another simple strategy is to avoid sitting for longer than 30 minutes at any one “sitting”. The effects of poor posture seem to accumulate the longer you maintain that poor posture. Just by getting up for a short walk around the office, or doing a few simple standing exercises can reduce the accumulated stress that has been placed on your back. Finally, spending more time in lumbar extension can help reduce the physiological adaptations that occur from “living in flexion”. This strategy can be achieved through several easy ways. Regular standing back bends (either standing or over a pivot) can help restore normal range of motion of the lumbar spine, as well as helping to reduce the effects of chronic lumbar flexion. Sometimes, it is easier and more effective to do lumbar extension exercises lying prone (on your tummy). One easy stretch is called the “cobra pose” in yoga terminology. Simply lie on your tummy with your hips relaxed, and stretch your back repeatedly in a backward direction through the use of your hands or your elbows (see photos). Even such a simple strategy such as spending more time lying on your tummy can make a huge difference in terms of counteracting the effects of chronic lumbar flexion, restoring range of motion to the lumbar spine, and helping reduce back pain.

Incorporating some of these strategies may be very effective in reducing and preventing back pain. As a result, you may not miss as much work, or may not lose your job. You will also have a greater chance of enjoying an active lifestyle, doing the daily activities that you need and want to do. Also, you may be able to avoid that costly back surgery that is not guaranteed to reduce or eliminate your back pain.

Resources:

Black, K. (1996) The influence of different sitting positions on cervical and lumbar posture. *Spine*(21) 65-70.

Cairns MC, Foster NE, Wright C. Randomized controlled trial of specific spinal stabilization exercises and conventional physiotherapy for recurrent low back pain. *Spine*. 2006;31(19):E670-81

Deyo, R., Mirza, S., & Martin, B. (2006). Back pain prevalence and visit rates. *Department of Medicine, UW, 31(23)*, 2724-2727. Retrieved December 2, 2009

Graham, J.(2009) The importance of Posture Correction. Retrieved December 2, 2009.

Lane, P. (2009, February 10). *Alarming increase in prevalence of chronic low-back pain..* Retrieved December 2, 2009

Rackwitz b, de Bie R, Limm h, von Garnier K, Ewert T. Segmental stabilizing exercises and low back pain. What is evidence? A systematic review of controlled trials. *Clin Rehabil*. 2006 Jul;20(7):553-67