

Newsletter

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Heads Up One More Reason Your Back Hurts

Although it may get you across the finish line sooner, the chances are pretty good that anterior head carriage is cramping your style.

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By the end of this article, as many as eight out of 10 readers will have improved their physical appearance, reduced mechanical stress on their body, and decreased their risk of painful spinal conditions. This is a strong claim, and it's natural to be skeptical of anything that can improve your health so dramatically in only a few minutes, but read on and you'll see why it's true.

As you read these words, immobilize your body in space. Don't move, shift, or adjust your position, particularly your head. Having done this, take note of your head carriage. How is your head situated in relation to the rest of your body? Is it balanced comfortably on your spine, aligned above your shoulders, with your neck muscles relaxed? Or is it held in front of your centre of gravity, with your chin either pushed forward or hanging down to read this column, relying on tension in the muscles in the back of your neck to prevent it from falling forward onto your chest?

It is estimated by some experts, including Dr. Jordan Myers, from Westwood Chiropractic, a leading clinic in Coquitlam, British Columbia that focuses on spinal and posture correction, that up to 80 per cent of people display a condition known as 'anterior head carriage,' or forward head posture (FHP), which is the state of holding the head forward of the body, as viewed from the side. "This is one of the most prevalent and serious spinal conditions that I see in my clinic, and in many of my patients it is the primary contributor to their pain and dysfunction," says Myers.

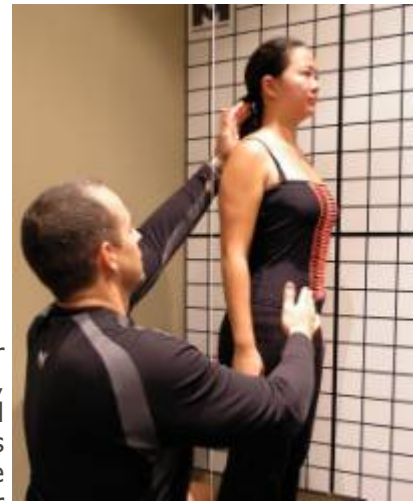
Healthy or neutral head position would see the head upright and level, with the ear aligned directly over the shoulder joint when viewed from the side. Since the human head is about the same size and weight as a bowling ball, moving it forward from its balance position allows gravity to take hold, pulling the head toward the floor. It is estimated that for every inch of anterior head movement, the muscles in the back of the neck holding the head upright are subject to an additional 15 to 30 pounds of tension. Three inches of forward head carriage would add 45 to 90 pounds of tension just to keep the head from dropping into your lap. When the head is held forward for extended periods of time, some of the muscles in the upper torso and neck will eventually shorten and lose their elasticity.

These include the levator scapulae, sternocleidomastoid, and scalene muscles in the neck, as well as the suboccipitals and upper trapezius. Eventually these muscles and the nearby ligaments can get so tight that they will prevent the head from ever returning to a neutral position. Other muscles that are held in a chronically lengthened state due to FHP will tend to weaken and become over-stretched beyond their normal limits. These muscle imbalances will also affect the position of the scapulae and overall function of the shoulder joints as well as other areas of the body, since FHP is usually accompanied by other posture issues.

Other long-term side effects of FHP can include:

- and dizziness
- neck and low-back pain

- diminished lung capacity
- loss of range of motion
- degenerative disc disease
- nerve root impingement



What does this mean to an active person who is concerned about their overall health and performance? Current research in the September, 2005 issue of Spine magazine suggests that as FHP increases, all measures of health status show significantly poorer scores, and there is clear evidence of increased pain and decreased function. One of the most convenient methods of checking for FHP is to sit or stand with your back flat against a wall, noting whether your head naturally rests against the wall or if you have to tip your head back to reach the wall. If you feel most comfortable with your head forward and away from the wall, you likely possess some degree of FHP. Distances of one, two, and three inches from the wall would generally represent mild, moderate, and severe cases of this condition.

Fortunately, it is possible to make improvements in head alignment quickly and at little or no cost. A 1995 Spine magazine study showed that with two to three sets of 10 neck retractions, which simply involved pulling the head back in alignment while keeping the eyes level, overall head position was improved significantly. This example is not meant to suggest that all cases of FHP will resolve this easily, but a mild, pro-active exercise regime is a good place to start for someone who is concerned about their head carriage. More established cases will likely require some degree of professional evaluation and guidance. Vancouver physiotherapist Sylvia Slosel, of Royal Center Physiotherapy, specializes in addressing her patient's full-body alignment as well as any specific pain or injury site. "Most chronic shoulder and mid back pain is actually aggravated or caused by poor neck positions and postures. The positive impact that I can have on a patient's quality of life by addressing their forward head posture is very rewarding. By working in conjunction with skilled trainers, we can really make a lasting difference for people." Awareness and prevention are key to avoiding lifelong problems arising from FHP. Performing a self-test or having a quick assessment by an individual trained in the identification of postural imbalances can easily detect this condition and many other postural considerations that might otherwise contribute to long-term health complications.