What is Forward Head Posture?

**Forward Head Posture (FHP)** is the anterior positioning of the cervical spine. It is a posture problem that is caused by several factors including sleeping with the head elevated too high, extended use of computers, lack of developed back muscle strength and lack of nutrients such as calcium.

**FHP** is what may be causing your neck and back pain. **FHP** is what Dr. Kernes can help you correct.

In the poster on the left, the first sketch (top-left) represents “perfect” head posture. A line dropped from the center of the external auditory meatus (EAM) would land directly in the center of the shoulder. The photograph on the right demonstrates someone with moderately severe forward head posture.

For every inch your head moves forwards, the head gains 10 pounds in weight, as far as the muscles in your upper back and neck are concerned, because they have to work much harder to keep the head (chin) from dropping forwards onto your chest. This forces the muscles that raise the chin to remain in constant contraction, putting pressure on the 3 Suboccipital nerves. **This nerve compression may cause headaches at the base of the skull, and may even mimic sinus headaches!**

Persistent forward head posture (a.k.a “hyperkyphotic posture”) puts compressive loads upon the upper thoracic vertebra, and is also associated with the development of Upper Thoracic Hump, which can devolve into Dowager Hump when the vertebra develop compression fractures (anterior wedging). **A recent study found this hyperkyphotic posture was associated with a 1.44 greater rate of mortality.**

It’s not uncommon to observe 2" of anterior head placement in new patients. **Would you be surprised that your neck and shoulders hurt if you had a 20 pound watermelon hanging around your neck?** That’s what forward head posture can do to you. Left uncorrected, FHP will continue to decline. Chiropractic can be very corrective, especially in the hands of a chiropractic rehabilitationist. **Our specialty is in reversing the joint fixations (what we refer to as “subluxations”) and in re-invigorating the muscles that normally retract the head.**
Forward Head Posture Articles

References:

The Chiropractic And Spinal Alignment and Cervical Curve Page
This page reviews how loss of function in the spine, and the loss of structural integrity (hypolordosis) can lead to degenerative changes and the neurological abnormalities associated with the Vertebral Subluxation Complex.

Myofascial Trigger Points, Neck Mobility, and Forward Head Posture in Episodic Tension-Type Headache
Headache 2006 (Sep); 46 (8): 1264—1272
Active TrPs in the upper trapezius, sternocleidomastoid, and temporalis muscles were more common in ETTH (Episodic Tension-Type Headache) subjects than in healthy controls, although TrP activity was not related to any clinical variable concerning the intensity and the temporal profile of headache. ETTH patients showed greater FHP and lesser neck mobility than healthy controls, although both disorders were not correlated with headache parameters.

Hyperkyphotic Posture and Risk of Future Osteoporotic Fractures: The Rancho Bernardo Study
J Bone Miner Res 2006 (Mar); 21 (3): 419—423
In logistic regression analyses, older women with hyperkyphotic posture had a 1.7-fold increased risk of having a future fracture independent of age, prior fracture, and spine or hip BMD (bone mineral density). There was a significant trend of increasing fracture risk with increasing kyphosis of the spine. Whereas hyperkyphosis may often result from vertebral fractures, our study findings suggest that hyperkyphotic posture itself may be an important risk factor for future fractures, independent of low BMD or fracture history.

Hyperkyphotic Posture and Poor Physical Functional Ability in Older Community-dwelling Men and Women: The Rancho Bernardo Study
Physical functional decline is often the determining factor that leads to loss of independence in older persons. Identifying risk factors for physical disability may lead to interventions that may prevent or delay the onset of functional decline. Our study objective was to determine the association between hyperkyphotic posture (Forward Head Posture) and physical functional limitations. In multiply adjusted comparisons, there was a graded stepwise increase in difficulty in bending, walking and climbing, measured grip strength, and ability to rise from a chair (with increased kyphosis of the spine).

Hyperkyphotic Posture Predicts Mortality in Older Community-dwelling Men and Women: A Prospective Study
J Am Geriatr Soc 2004 (Oct); 52 (10): 1662—1667
To determine the association between hyperkyphotic posture and rate of mortality, the authors tracked 1,353 participants from the Rancho Bernardo Study who had measurements of kyphotic posture made at an osteoporosis visit. Participants were followed for an average of 4.2 years, with mortality and cause of death confirmed using review of death certificates. This study found that persons with hyperkyphotic posture had a 1.44 greater rate of mortality.

Upper Crossed Syndrome and Its Relationship to Cervicogenic Headache
The principles of upper crossed syndrome and the use of exercise, chiropractic care, and myofascial release in the treatment of cervicogenic headache are discussed. A review of the literature indicates that analyzing muscle imbalance as well as vertebral subluxation may increase the effectiveness of chiropractic treatment for cervicogenic headache. NOTE: There are more articles on this topic in the Rehabilitation Diplomate Information Page.

A Study on the Prevalence of and Risk Factors for Neck Pain Among University Academic Staff in Hong Kong
J Occup Rehabil 2002 (Jun); 12 (2): 77–91
Among those with neck pain during computer processing, 60.3% had a forward head posture. However, a low correlation between psychosocial factors and neck pain was demonstrated (r = 0.343). Academic staff in tertiary institutions could be considered as a high-risk group of job-related neck pain.

Forward Head Posture is the Cause of ‘Straight Spine Syndrome’ in Many Professionals
Indian J Occupat and Environmental Med 2000 (Jul); 4 (3): 122—124
Our results show that forward head posture is the commonest defect found in variety of professionals. This leads to SSS, an early functional stage, and can lead to serious compression of cervical nerve roots. Education programmes on right posture, ergonomics, regular corrective exercises may prevent SSS.

The Associations Between Adolescent Head-on-neck Posture, Backpack Weight, and Anthropometric Features
Spine 1999 (Nov 1); 24 (21): 2262–2267
A significant change in craniovertebral angle was found at every year level, when comparing standing posture with no backpack with posture when carrying a backpack. The change was greatest for the youngest students. There are more articles like this in the Backpack Page.

The Relationship Between Forward Head Posture and Temporomandibular Disorders
J Orofac Pain 1995 (Spring); 9 (2): 161—167
This study investigated the relationship between forward head posture and temporomandibular disorder symptoms. Thirty-three temporomandibular disorder patients with predominant complaints of masticatory muscle pain were compared with an age- and gender-matched control group. In other words, when evaluating the ear position with respect to the seventh cervical vertebra, the head was positioned more forward in the group with temporomandibular disorders than in the control group (P < .05).

Cervical Headache: An Investigation of Natural Head Posture and Upper Cervical Flexor Muscle Performance
Cephalalgia 1993 (Aug); 13 (4): 272—284
In this study, 60 female subjects, aged between 25 and 40 years, were divided into two equal groups on the basis of absence or presence of headache. A passive accessory intervertebral mobility (PAIVM) examination was performed to confirm an upper cervical articular cause of the subjects' headache and a questionnaire was used to establish a profile of the headache population. Measurements of crano-cervical posture and isometric strength and endurance of the upper cervical flexor muscles were compared between the two groups of subjects. The headache group was found to be significantly different from the non-headache group in respect to forward head posture (FHP) (t = -5.98, p < 0.00005), less isometric strength (t = 3.43, p < 0.001) and less endurance (t = 8.71, p < 0.0005) of the upper cervical flexors.

Incidence of Common Postural Abnormalities in the Cervical, Shoulder, and Thoracic Regions and their Association with Pain in Two Age Groups of Healthy Subjects
Phys Ther 1992 (Jun); 72 (6): 425–431
Subjects with kyphosis and rounded shoulders had an increased incidence of interscapular pain, and those with a forward-head posture had an increased incidence of cervical, interscapular, and headache pain.

Forward Head Posture
Forward head posture is a clinical entity that has been identified by multiple authors as a significant factor in a variety of musculoskeletal pain syndromes. [2-7] Although some reports are essentially anecdotal, [2-4] several reports use sophisticated statistical analyses and healthy controls versus painful subjects to establish forward head posture as a real clinical entity with significant musculoskeletal consequences. [5-7]
Neck Posture a Key to Pain Relief

Head and neck posture may be a major factor in the pain experienced by many fibromyalgia (FMS) and chronic fatigue and immune dysfunction syndrome (CFIDS) patients. Case studies presented last week showed that successful treatment of neck and jaw pain made significant improvements in FMS and CFIDS patients. Herbert P. Gordon, D.D.S., Ph.D., P.S., attributed a major portion of head, neck, jaw, and shoulder pain to the posture of the sufferer. Dr. Gordon, an assistant professor of oral medicine at the University of Washington, Seattle, presented his theories and techniques for pain relief to the conference, which was attended by 200 FMS and CFIDS survivors.

Forward Head / Forward Shoulders

Probably one of the most common postural distortions we see is the forward head, forward shoulders posture. This distortion often appears in teenagers and progresses to old age. Porterfield and DeRosa1 have provided some important information regarding this problem. They state1 that while lengthening or weakness of the scapular retractors is often blamed, a major cause is weakness and lengthening of the abdominal muscles, allowing the chest to descend and shifting the weight of the upper trunk anteriorly. This causes the chest to descend with the scapula shifting forward around the rib cage, pressing the clavicle to the first rib. In this position, the humerus internally rotates and the head and neck are brought forward.