

Proper Posture

by Tracy Anderson

The information provided is not intended to treat, prevent, or diagnose a medical disorder. If you have back pain, contact your physician or therapist.

Posture is simply the position of your body parts in relationship to each other. Posture can be described as **static** or **dynamic**. Standing, sitting, or lying are stationary positions and thus would be described as static and dynamic posture would describe moving your body from one position to another. We will consider each weight bearing joint as a postural segment, and discuss proper alignment of each.

Think of the spinal column as blocks with a series of counter balancing curves. These curves must be maintained during rest and activity so they can act as shock absorbers and reduce the amount or possibility of injury. The thoracic (upper back) and sacral curves (lower back, near tailbone) act to counter the cervical (posterior neck) and lumbar curves (lower back, above sacral curve). Looking at someone from the back you will notice that the thoracic and sacral curves are concave or curved inward and the cervical and lumbar curves are convex or curved outward. Poor posture is the result of one or more of these vertebral curves increasing or decreasing significantly.

An extreme form of poor posture is known as the slouch, or **kyphosis**, and is where the shoulders are rolled forward. This can cause the muscles in the chest to shorten and reduce flexibility in the upper extremities. The opposite position is known as the swayback, or **lordosis**, here the stomach sticks out too far to the front and the buttocks too far to the rear. This position will put additional pressure on the lower back and extended over time will cause lower back pain. Lateral, or side ways, curves should not exist, this is known as a pathological condition called **scoliosis**.

One way to assess if you have proper posture is the "plumb line method". This is done by hanging a dead weight, from a string, off of a fixed higher point, or ceiling. The body should be looked at from the side, front and rear positions while the person is standing upright.

In the side view, adjust yourself so the plumb line passes just in front your ankle (lateral malleolus). For ideal posture to occur the line must pass through these landmarks:

Head - Through ear lobe

Shoulder - Through tip of acromion process

Middle back - In front of the vertebral column

Lower back - Through the vertebral column

Pelvis - Should appear level

Hip - Slightly behind the hip joint axis, or through the greater trochanter of the femur

Knee - Slightly behind the knee cap

Ankle - Just in front of the ankle joint (the knobby protrusion on the side)

From the front view, adjust yourself so the line divides your body into equal left and right halves.

Head - Extended and level, not flexed or hyperextended

Shoulder - Level, and not elevated or depressed

Sternum - Centered in the midline

Hip - Level and not tilted to either side

Knee - Level and not bowed inward or outward

Ankle - Normal arch in feet

Feet - Slight outward toeing

The viewing from the rear is similar to the front position

Test Your Posture

Stand with the back of your head, shoulder blades and butt against a wall, and your heels two to four inches from the wall. You should be able to fit your hand snugly between your lower back and wall. With an increased lordosis you would have more than a hands width, and to correct this you need to adjust your pelvis to decrease the space.

Tips on Posture

If you have poor posture, and many do, then continually practice these tips, and within a month they'll be habitual. Stand up straight, keep your backbone straight and hold your shoulders back. Pull in your stomach and butt, and tuck your chin. Sit up straight when seated, in general sitting puts more pressure on your lower back than standing. Sit in chairs with straight backs or a lumbar support. The seat should be

high enough that your thighs rest horizontally on the seat. Wear proper fitting shoes with low or flat heels. High heels stress your back. Most importantly, practice good posture. The more you practice, the stronger the muscles in your back become, and the easier it is to maintain. Also this will help reduce lower, and middle, back stress.

Maintaining proper posture during exercise and sports activities will reduce the possibility of injury and can actually make you stronger. By proper aligning of the joints, more muscles can come into play to perform a certain function or movement. For example, try squatting with poor posture or form, you will always do more weight with correct posture, and you are less likely to get injured doing it.

If you have any questions or comments, I can be contacted through my web site at www.LFNOnline.com.