

# POSTURE & EXERCISE

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Posture is defined as the position of the body or body parts as a whole. This incorporates sitting, standing and different life activities such as performing gym exercise. The text book ideal posture is defined by having a person standing sideways to us, placing a plumb line from their ear to the ground. Ideally the string line should go from the middle of the ear, through the middle of the shoulder and hip joint and end up in the middle of the ankle bones. Having this ideal posture enables the body to:

- Help prevent the resist injuries and progressive deformities such as osteoarthritis
- Minimise stress and strain of joints and muscles
- Help with shock and absorption
- Help transfer of energy during movement

From a biomechanical perspective, posture is a by product of what the body allows itself to do. IN other words, your bodies ability to move dictates what your posture is like. e.g.; if you are tight in your chest muscles then you will automatically want to slump forward; if you have great flexibility through your chest muscles ( pecs) then you will more that likely have an open posture where there is a good balance of forces between the muscles in the front of the body and the muscles in the back, both in terms of flexibility and in strength.

There are a couple of common postures that are different to the ideal alignment.

## **Sway Back Posture**

This posture is categorised by the hips and ankle bones being in front of the plumb line, and the upper back trying to counterbalance things by being further behind the line than usual. Exercises that help this include stretching of the hamstrings, and strengthening of the external obliques ( crunches with a twist), upper back exercises ( seated/bent over row, reverse flies) ad the deep neck muscles ( tucking the chin in)

## **Flat Back Posture**

This posture is recognised by a lack of curve inward of the lower back. The head may be slightly carried forward and the upper back may have an increased curve. Exercises that may help this include stretching of hamstrings and abdominals, performing the "cobra stretch". Strengthening should focus on the hip flexors, particularly the rectus femoris ( the only thigh muscle that is a hip flexor)

## **Lordotic Posture**

Lordotic posture is a term used to describe a posture with increased forward curvature of the lower back. This can be due to the pelvis being tilted forward. Other curves of the back are generally within the expected normal limits. It is quite commonly seen in people with a dance history. Exercises that may help include stretching the rectus femoris (lunge stretch with the foot pulled toward the backside) and lower back flexion stretch ( lying on your back and pulling

your knees to you chest so you are in a ball). Strengthening exercises may include hamstrings ( hamstring curl, falling hamstrings and straight leg dead lift( and abdominal crunches focusing on the rectus abdominus ( your six pack muscles) and obliques. It is best to avoid leg extension exercises and the "cobra" stretch.

## **Kyphotic Posture**

This means you have an increase curve in the middle and upper back region. Think the Hunchback of Notre-Dame! This is the most common posture which is not helped by our sedentary, desk bound jobs. This may also be caused by osteoporosis in the elderly. Exercises that may help prevent or reduce the kyphosis include stretching the chest muscles and lying on a swiss ball or towel in the crucifix position. Strengthening exercises that are good include mid to upper back exercise ( such as seated /bent over row, lat pulldown, reverse flies) and tucking the chin in. It is best to avoid too much bench press and shoulder shrugs with this posture.

The best thing to remember with gym exercise and posture is to think to what actions you commonly perform in sport or in your job, and perform exercises that do the opposite

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