

**POSTURE: INTRODUCTION AND ITS RELATIONSHIP TO PARTICIPATION IN SPORTS**

Watson, A. W. S.

University of Limerick, Ireland

Posture is concerned with the shape and alignment of the various body segments. In the context of sport, posture is best viewed as number of isolated areas such as kyphosis, lordosis and scoliosis. When working with athletes we in Ireland assess 15 aspects of posture:

Shoulder Symmetry, Scapulae Abduction, Back Symmetry, Scoliosis, Rib Hump, Forward Head, Kyphosis, Chest Posture, Lumbar Lordosis, Sway Back, Knee Interspace, Knee Hyper-Extension, Tibial Torsion, Ankle Mechanics, Foot Arches.

Each of these aspects of posture is rated on a five point scale:

5 = Good Posture, 3 = Moderate Deviation, 1 = Marked Deviation

In the context of sport, posture defects are normally due to muscle imbalance: some muscle groups being strong and short while the opposing muscle groups are long and weak. Abducted scapulae are due to weak serratus anterior, rhomboids and subscapularis, while the opposing muscle groups on the chest are tight. This defect is common in children who are inactive and in athletes who do not train their upper bodies. Lumbar lordosis can be caused by over development of the psoas muscle due too much kicking (as in soccer), or doing leg-lifts or sit-ups with the legs straight. It is more likely if the abdominal and hamstring muscles are weak. 36% of Irish footballers have moderate lordosis and 17% have a marked defect (Watson 1995). Most sports develop some muscle groups more than others and can cause deviations of posture which, in turn, may lead to injury. Sports like hurling, tennis and rowing use one side of the body more than the other. Such sports are associated with a high incidence of scoliosis, asymmetric shoulder and asymmetric back.

**REFERENCES**

Watson AWS: Sports injuries in footballers related to defects of posture and body mechanics. *Journal of Sports Medicine and Physical Fitness* 35: 289-94, 1995.

Watson AWS: *Physical fitness and athletic performance* (second edition). London: Longmans, 1995.