

# Promoting Optimal Low Back Function

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# Non-Specific Low Back Pain

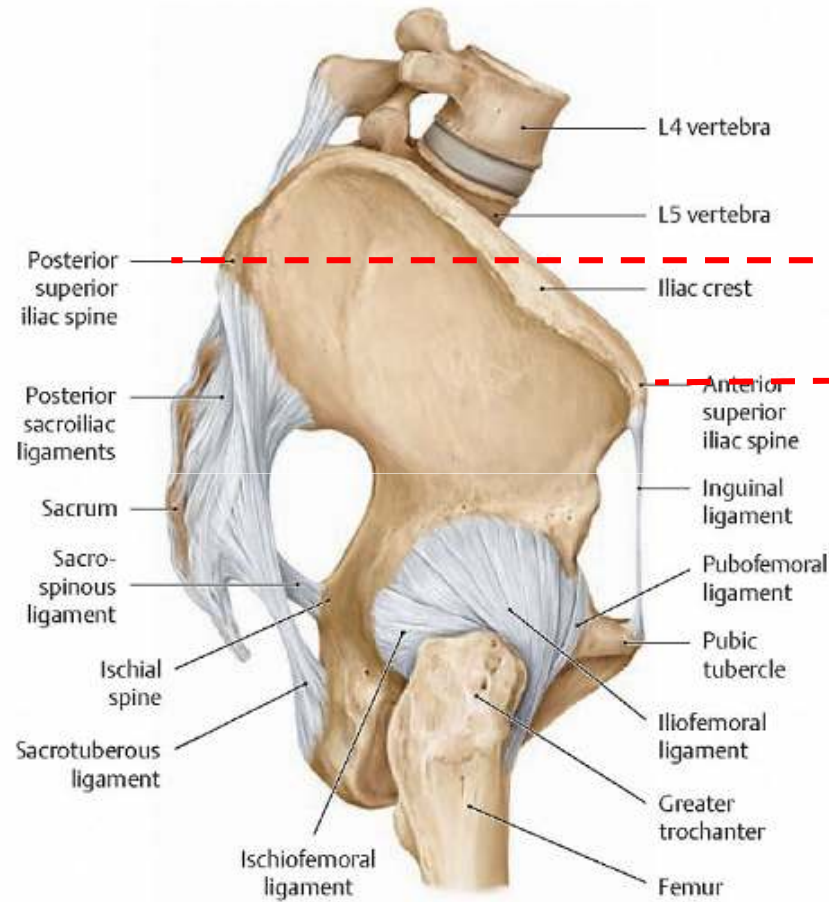
- most cases of back pain are non-specific and cannot be attributed to any serious pathology (specific causes of low back pain are uncommon – less than 15% of all back pain - Airaksinen et al, 2006)

# Pelvic Assessment

*“Without minimising the importance of proper foot positions that establish the base of support, it may be said that the position of the pelvis is the key to good or faulty postural alignment.*

*Kendall (1993)*

# Pelvic Position



● PSIS  $\left[ \begin{array}{l} 3/4'' - \text{FEMALES} \\ 1/2'' - \text{MALE} \end{array} \right.$

● ASIS

# Pelvic Assessment



**ANTERIOR PELVIC TILT**



**POSTERIOR PELVIC TILT**

# Pelvic Assessment

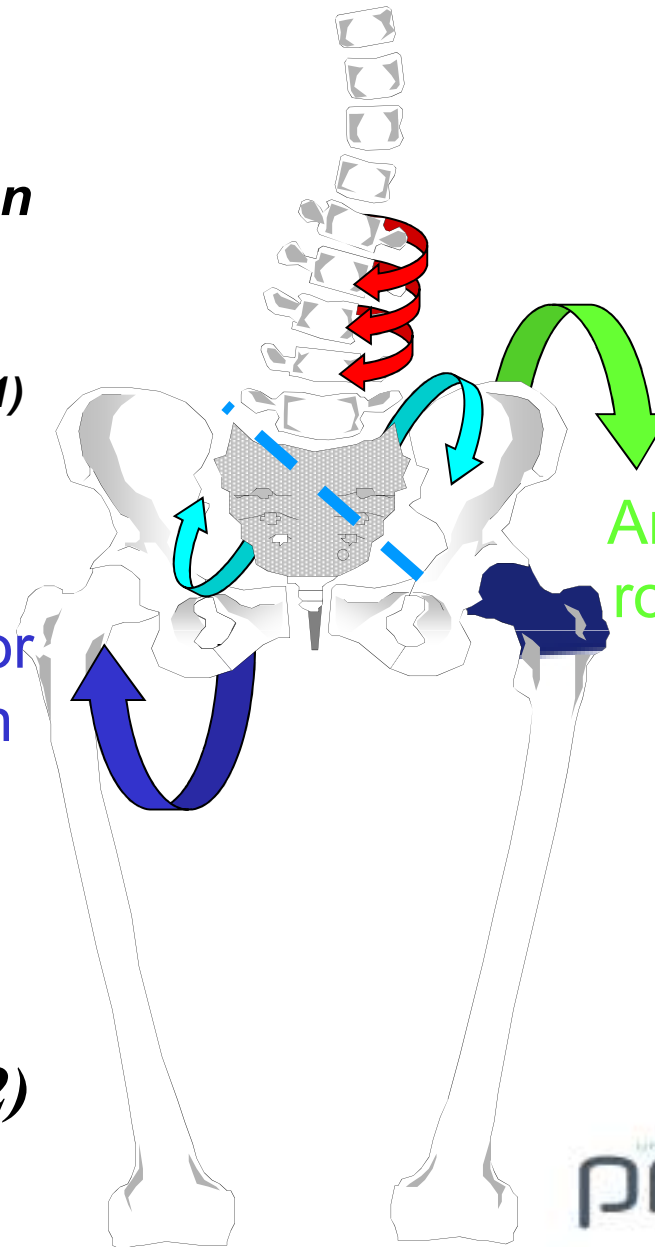


***“Postural asymmetry of the pelvis is common, and is evident when there is torsion of one ilium in relation to the other.”***

***Norris (2001)***

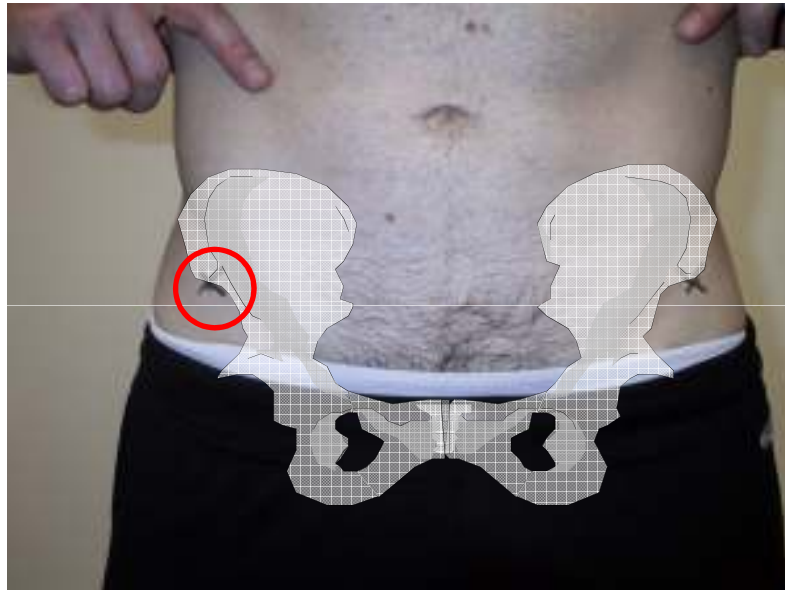
**Posterior rotation**

**Anterior rotation**



***From Schamberger (2002)***

# Pelvic Assessment



# Pelvic Assessment



# Leg Length Assessment



*Compensations for even a slightly short leg can have long-term side-effects, manifesting as lower back pain, hip and knee pain, uneven gait, and various foot and lower leg problems.*

**(Zehr, 2002)**

# Promoting Pelvic Balance

*“Leg length discrepancy (LLD) is often a primary factor in postural, biomechanical and injury problems.”  
(Ward, 2004)*



# The Global View

*The most effective back programmes appear to emphasise trunk stabilisation (Hides et al, 2001; Saal and Saal, 1989) in tandem with the promotion of optimal mobility at the hips and knee and ankle (Scannell and McGill, 2003)*

