

## **Static Stretching- biomechanical effects across the lifespan**

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Stretching is one of the most prescribed exercises provided by physiotherapists. The most commonly applied type of stretching is static stretching. This type of stretching is often used to improve and maintain joint range of motion and improve function. The proposed mechanisms associated with changes in ROM following stretching regimes include neurophysiological and biomechanical phenomena. Increases in musculotendinous length, increased stretch tolerance, alterations in muscle stiffness, viscoelastic stress relaxation and reflexes have been observed. This presentation will provide a summary of a series of studies that have investigated the effects of long term stretching interventions in adolescent male populations and in elderly populations. Data will also be presented with respect to short and long term stretching interventions in those people with a common health condition, osteoarthritis. Information will be presented to look at the different biomechanical responses in these populations as well as the effects of static stretching on function.