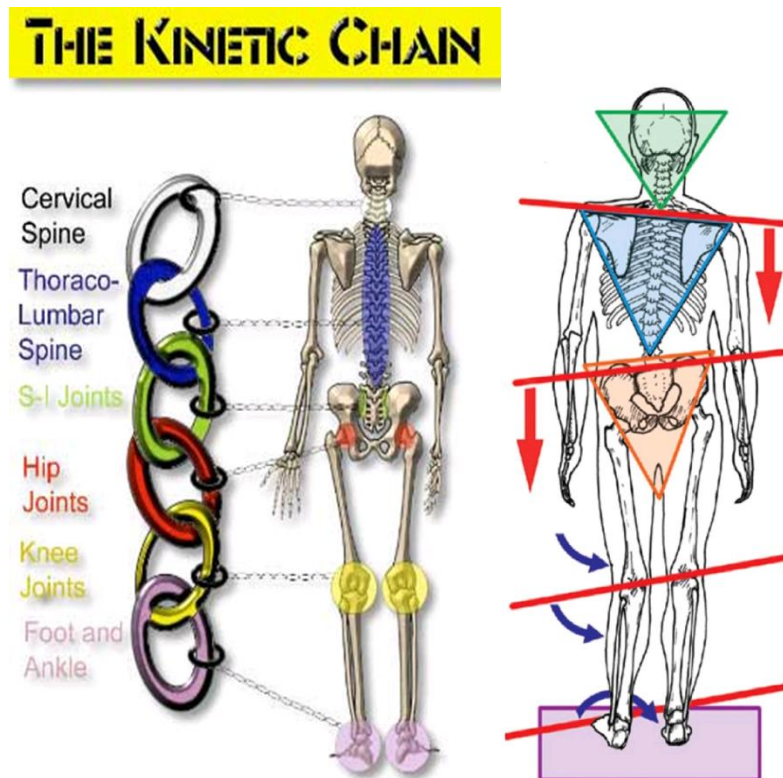
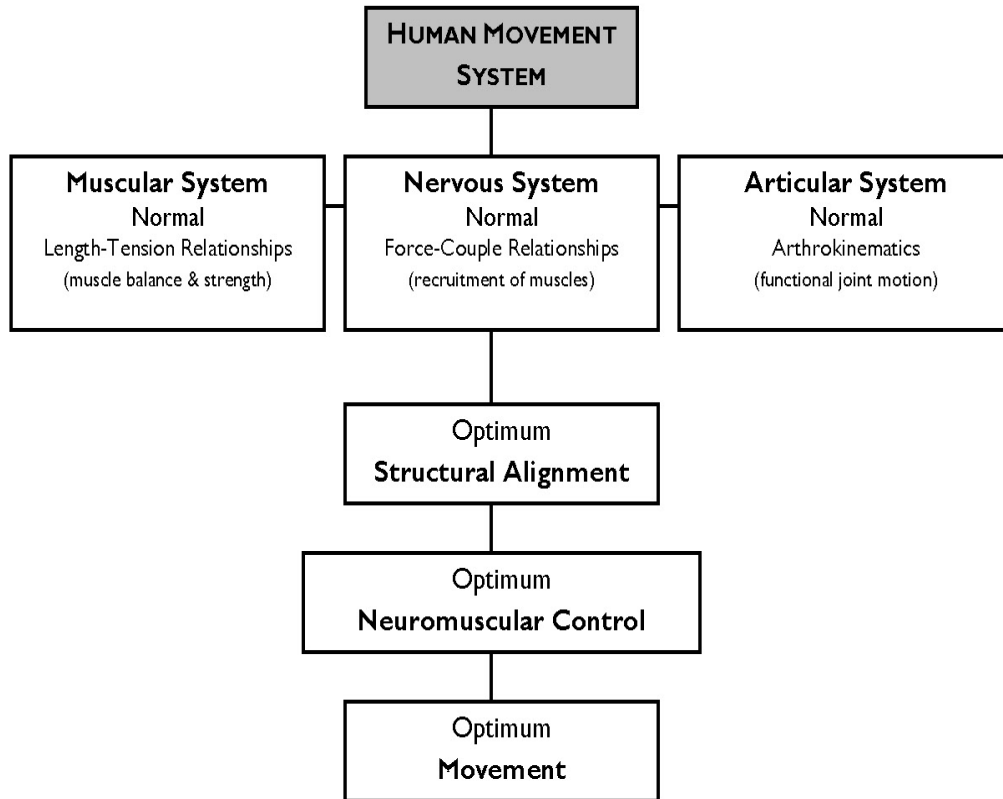


The Kinetic Chain

The Human Movement System (Kinetic Chain) is composed of three interrelated systems:

1. **Muscular** (muscles, tendons, ligaments and fascia)
2. **Nervous** (central and peripheral nerves)
3. **Articular** (joints)





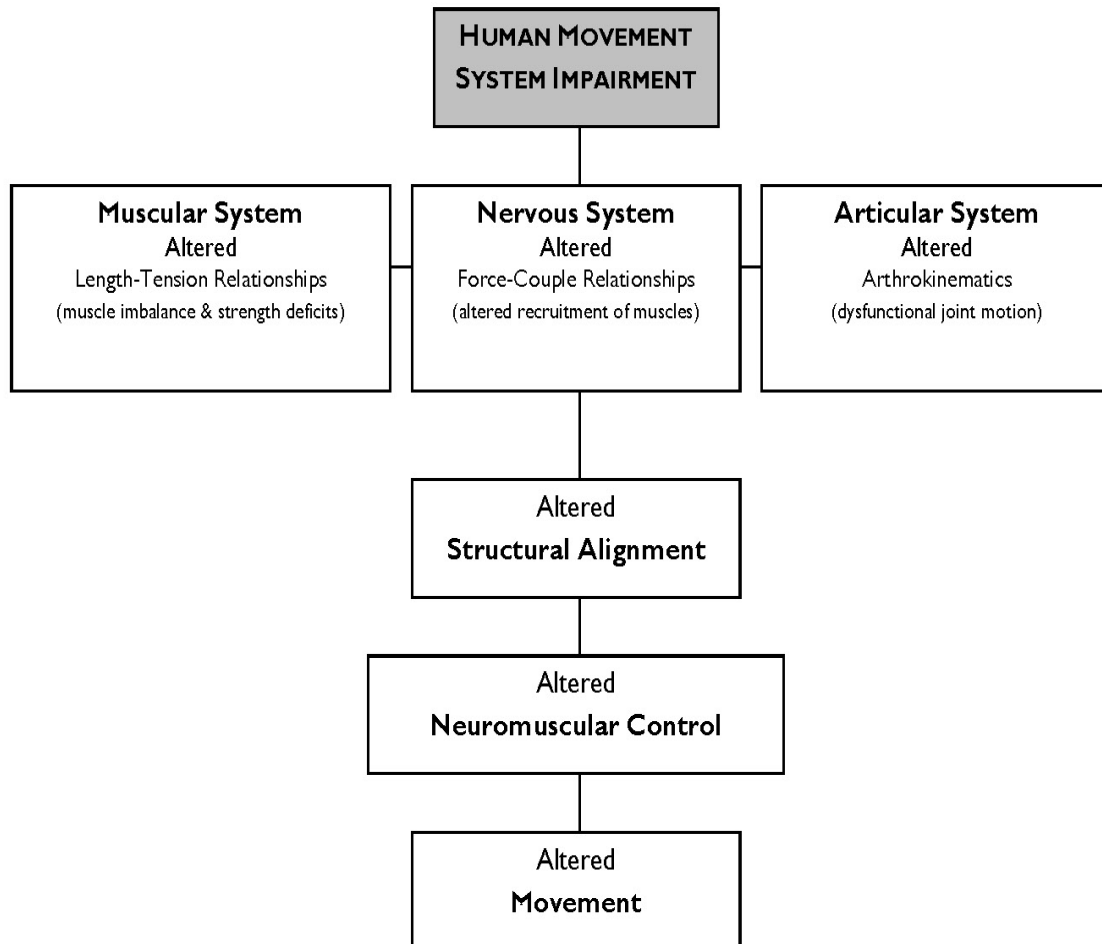
Assessing Kinetic Chain Dysfunction

Each joint region has specific biomechanical motions based upon structure, function and surrounding joints (both above and below)

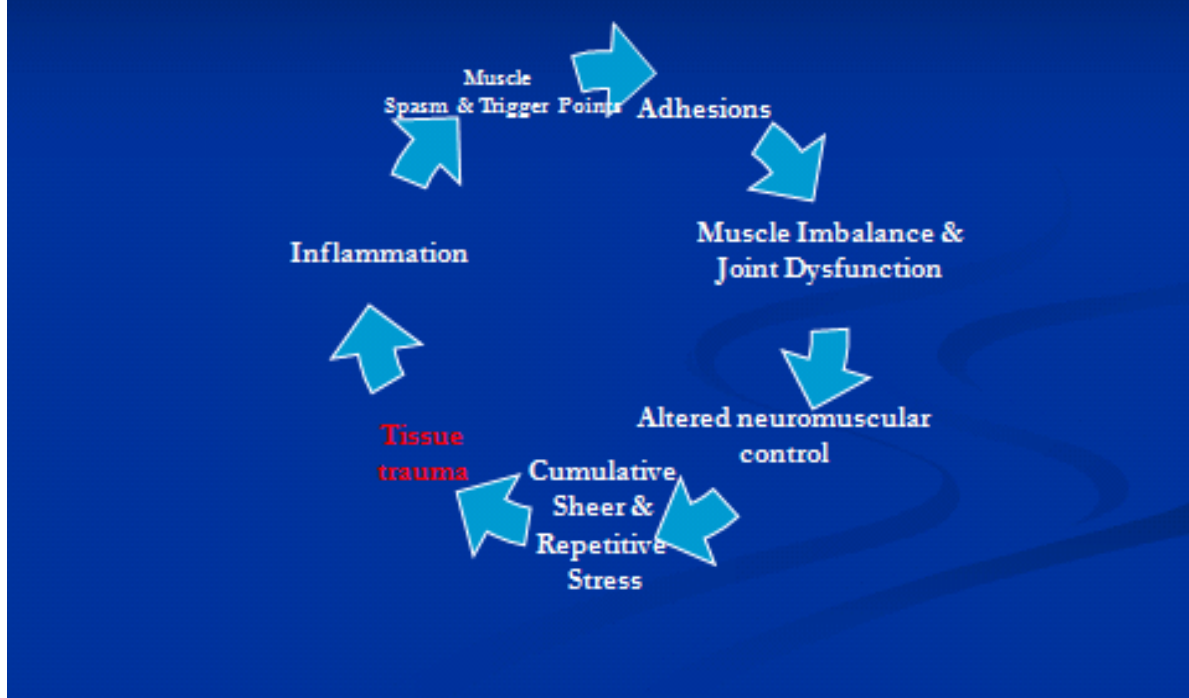
Assessment of the kinetic chain can be done by systematically viewing the body at specific check points statically and dynamically. These checkpoints include:

1. Foot/Ankle
2. Knee
3. Lumbo-Pelvic-Hip Complex (LPHC)
4. Shoulder and cervical spine (Upper Body)

Compensations occur when a specific motion deviates from its normal path, resulting in impaired movements. Movement impairments can lead to muscle imbalance, joint dysfunction and nervous system dysfunction. Eventually a **cumulative injury cycle** results:



Cumulative Injury Cycle Chronic Inflammation



Treating Kinetic Chain Dysfunction

Treating Kinetic Chain Dysfunction involves correctly identifying the movement impairments and addressing all components of the Human Movement System (Muscular, Nervous and Articular).

Effective therapies include:

1. Trigger point acupuncture/dry needling
2. Soft tissue manipulation
3. Joint manipulation
4. Corrective exercises
5. Supportive nutrition