

## KNEE PAIN AND FAULTY BIOMECHANICS

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For many people, knee pain is a source of frustration. Common injuries may include things like acute or chronic patellar tendinitis, patellofemoral syndromes, iliotibial band syndromes or lateral knee pain, meniscal tears or ligamentous sprains. We often see these kinds of injuries when people take up a new sport (eg. running) or suddenly increase the intensity of their activity levels.

Often, these injuries are due to poor biomechanics in the leg. However, there are also poor mechanics in the back and pelvis that put the knee and ankle/foot into a bad position. This is why we check out the whole body even when you have knee pain!

Common biomechanical faults that can lead to knee pain include....

- **Over pronation** - often referred to as “fallen arches”. You can have varying degrees of pronation that causes the arches to roll or fall inwards. It often looks as if the middle portion of your foot has collapsed. There can be underlying ligamentous laxity and/or muscular weakness of the support structures in the foot.
- **Weak hip muscles** – commonly located in the buttocks or gluteal muscles and often accompanied by muscular imbalances around the pelvis/low back and leg. Often, the pelvis twists when you stand on one leg and the knee is forced to turn inwards.
- **Poor tracking of the knee** – usually observed in a semi squat or lunge where the knee seems to travel inwards (ie. “knock-kneed”) instead of lining up properly over the 2<sup>nd</sup> toe . This is usually found with a combination of overpronation, weak hip muscles and muscular imbalances around the knee. Muscular imbalances mean that some muscles are too strong and some muscles are too weak and/or tight.



It is possible to fix these biomechanical faults and teach you how to move better. Physiotherapy can help you correct these issues through manual therapy, exercises, education, modalities and/or needling (IMS or acupuncture) according to your specific needs. Let us help you return to the activities you love!