How Can Physiotherapy Help

- Physiotherapists are specifically trained in musculoskeletal assessment. This makes them the ideal health professionals to treat injuries or problems with joints, bones, muscles, tendons and ligaments. They can recognize contributing factors to knee pain.
- After a detailed **assessment**, a **treatment plan** would be designed, to meet the needs and goals of the client. This may include:

Education

- on the condition, injury
- on proper footwear and orthotics or braces if needed. Different knee braces are made to support specific structures so it is important to be fitted properly and suitable for the appropriate tissue injury
- on prevention of re-injury and timely return to sport, work or leisure activities

Manual Therapy

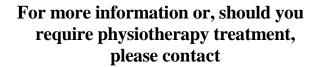
 techniques to help assist the body to loosen and promote proper healing of specific tissues such as fascia, muscle, ligaments, nerve, bones and joints

Modalities

• machines used to help decrease pain/swelling and promote healing

Exercises

• stretching, strengthening, co-ordination, balance, proprioception



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Knee Pain



What You Should Know

Look inside to see how Physiotherapy can help you to..

- Return to normal activity as soon as possible
- Prevent re-injury or disability

The Knee Joint

The knee joint is unique in that it carries body weight at the same time as it provides flexibility and mobility. It is formed by the femur, the tibia

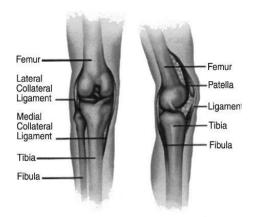
and the patella and held together by muscles,

ligaments and tendons.

The top part of the femur is the hip joint. The muscles of the hip joint control the movement of the femur, as well as those going over the knee joint. Likewise, the muscles at the ankle control the bottom part of the tibia.

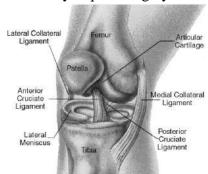
The strength, flexibility, endurance and propioception (body awareness) at the hip, knee and ankle joints will all affect the strain at the knee.

Flat feet, previous ankle sprain, poor hip muscle control, back problems can all affect how the knee responds to movement and weight bearing activities, leading to injury through repeated strain or quick sudden movements.



What Causes Knee Pain

Ligament Sprains – ligaments are bands of strong tissue that stabilize the knee joint. Over stretching can cause the ligament fibre to tear and bleed into the surrounding tissue, causing pain, swelling and a feeling of 'giving way'. Severe tears may require surgery.



Cartilage Tears – cartilage (or the meniscus) also helps stabilize and protect the knee joint. Pressure from twisting and turning during weight bearing exercise may tear the cartilage, causing pain, swelling and locking of the knee joint.

Tendon Strains – tendons are cord-like bands that connect muscle to bone. These can be strained with overuse such as in patellar tendonitis.

Muscle Strains – tight or contracted muscles cause pain and restrict knee joint mobility.

PatelloFemoral Syndrome –malalignment of the patella can cause excessive friction and strain under the kneecap. It can result in knee pain. It may have a number of causes and should be assessed by your physiotherapist.

Tips to Reduce Risk of Injury

- Warm up before any activity.
- Ensure good flexibility and strength at back, hip, knee and ankle joints (sport specific training)
- Ensure good proprioception and balance throughout the leg, especially with twisting movements
- Proper footwear replace athletic shoes as needed, and ensure proper fit of shoe. An orthotic may be needed.
- Use brace if needed
- Ensure good body mechanics for activities performed

Ligaments help provide proprioception (joint awareness), therefore injury to these receptors can lead to re-injury unless properly retrained