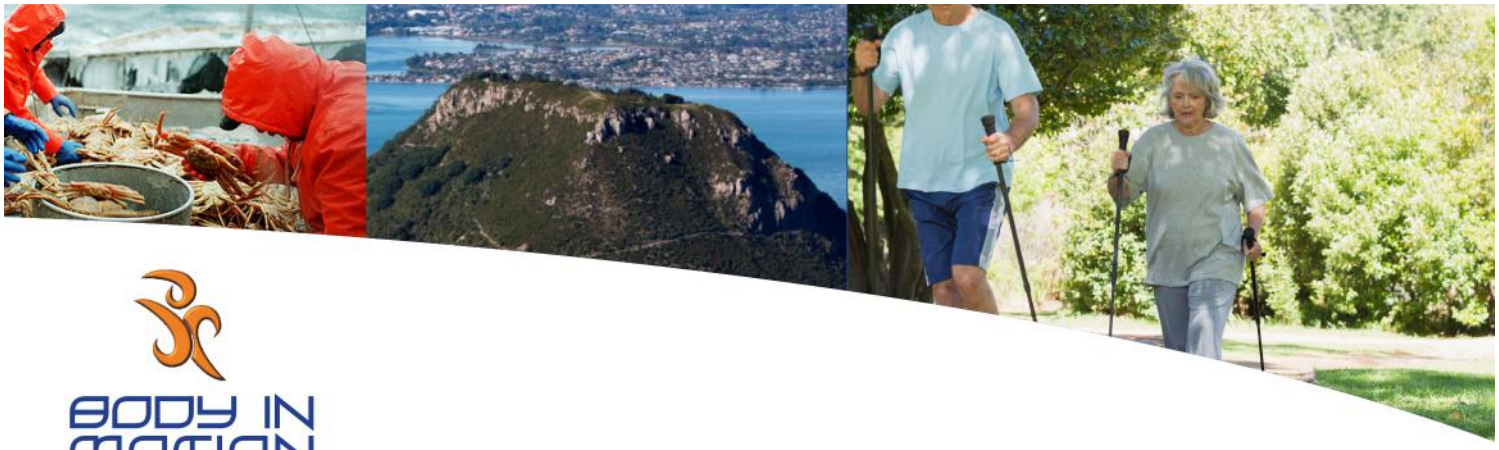

BODY IN MOTION

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Body In Motion's team of physiotherapists are here not only to help you back from injury, but also to help you reduce your risk of getting injured. As education is a key component of injury prevention, please read this month's look at ***Knee Cruciate Ligaments****, and feel free to contact any one of the team to help reduce your risk!*

Cruciate Ligament Injuries

The cruciate ligaments form part of the knee's passive stability system. Located between the thigh bone (femur) and main shin bone (tibia), these two ligaments are cleverly named "cruciates" as they cross one in front of the other inside the knee joint. The anterior cruciate ligament (ACL) sits in front; the posterior cruciate ligaments (PCL), behind. The ACL has an important role in stabilising the knee, preventing hyperextension (or over-straightening) of the joint by restricting forward movement of the shin under the femur. The PCL has a lesser stabilising role, restricting its backward movement.

The ACL is most often injured when the knee is weight bearing and exposed to a rotational or twisting load, such as when landing from a jump, stopping suddenly, or changing direction ("cutting") in running sports. It can also be injured in collisions or tackles, especially if the tackle bends the knee backwards. Quite often, severe ACL injuries are associated with an audible "pop" in the knee joint, and are usually associated with significant instability or feelings that the knee "gives way". Severe ACL injuries are also usually associated with the rapid onset of significant swelling in the knee.

PCL injuries are less common than ACL injuries, and this is partly due to the relative strength of the ligament itself. The most common cause of injury to the PCL is a direct blow to the front of the shin when the knee is bent, such as when the knee hits the dashboard in a car crash, or falling onto a bent knee. Signs and symptoms of PCL injury are usually less severe than with the ACL, but include swelling, mild instability and stiffness.

As with all ligaments injuries, cruciate sprains can range in severity from mild overstretching to complete ruptures. Mild injuries are amenable to rehabilitation, with ACL injuries relying heavily on hamstring strength for support while PCL injuries rely on more quadriceps strength. Ruptures of the PCL are usually managed in a similar manner to more mild sprains, but as ACL ruptures can have more significant effects on stability, these are often managed with surgical reconstruction and extensive

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rehabilitation.

As previously mentioned, both of these ligaments are important to the overall stability of the knee, and injury to either can result in long term problems if not well rehabilitated.