Training Considerations after Hamstring Injury in Athletes

Researchers in the UK have recently completed a thorough review of current hamstring injury rehabilitation protocols titled “Training Considerations after Hamstring Injury in Athletes” which was published in the 2009 Strength and Conditioning Journal 31(1).

In their review the researchers concluded that there are essentially 6 stages that need to be covered to effectively rehabilitate these injuries and prevent recurrence – these are:

Stage One – Initial Treatment
This involves the common RICE formula of rest, ice, compression and elevation for the treatment of acute soft tissue injuries.

Stage Two - Restoring Range of Motion
Involving a minimum of 4 stretching session each day using a combination 3-4 stretches – held for 30-45 seconds each – the early increase in range of motion is essential in reducing scar tissue.

Stage Three – Initial Strengthening
Using very light to no resistance that incorporates use of available range of motion – exercises such as deadlifts, Romanian deadlifts and light leg curls if available. This stage is done along with the range of motion stretching.

Stage Four – Slow Eccentric Strengthening
Including slow lowering exercises with Deadlifts, Nordic Hamstring Lowers (ask your Get Active Physio to show you this great exercise), back extensions and lunges.

Stage Five – High Speed Eccentric
More plyometric (jumping based) and sports specific drill at greater speeds – such as split jumps, depth jumps from a bench and other bounding drills.

Stage Six – Sports Specific
Taking the athlete from straight line activities to change of direction tasks with different surfaces and body positions e.g. single leg bounding, acceleration drills, zig-zag running and hopping activities.

Summary
It is clear from this overview that each stage must be carefully monitored as attempting to progress too soon to the next level can lead to re-injury and frustration.