

# WAKEFIELD



# SPORTS CLINIC

## **Preventing Hamstring Injury by Mat Prior**

Hamstring strain is a very common injury in sport, with up to 25% of any group of athletes suffering one in a given season. Whilst we know how to treat an injured hamstring, an equally important role is that of preventing injury.

### ***What are the hamstrings?***

The hamstrings are a group of muscles that span the length of the back of the thigh; the 2 biceps femoris muscles on the outside (lateral) part of the thigh, and the semimembranosus & semitendinosus muscles on the inside (medial) part of the thigh.

The hamstrings work to bend the knee & extend the hip, but functionally they are important to act as a 'brake' to control of the swing of the leg with running & kicking, as well as providing power for these activities.

### ***How can I reduce my chances of straining my hamstring?***

Some risks for hamstring strain you can't change – such as increasing age and having had a hamstring strain in the past. Of all the risks, having a past history of hamstring strain seems to be the biggest predictor of injury in the future, with athletes being 2-6 times more likely to suffer another one. This explains why many people seem to have recurrent problems.

Similarly, the mid-20s seems to be the time at which the risk for hamstring injury increases the most.

But there are a number of things you can influence to decrease the chances of hurting your hamstring. Having good hamstring strength, and perhaps more importantly having a good balance of muscle strength between your quads and hamstrings, helps. The hamstrings are often neglected with resistance training, but there are several simple exercises that can be used to strengthen them:



**Hamstring curl:**

Using weights or rubber band, bring heels up to bottom.



**Nordic Hamstring:**

With feet secured, slowly lower trunk toward ground.



**Drinking bird:**

Keep knee straight, & bend forward over your leg, reaching toward toes.

The evidence for stretching is mixed. Whilst stretching isn't harmful, the length of the hamstrings hasn't been shown to be strongly linked with the risk of injury. Warm-up, however, is important – perhaps more so than stretching.

On the other hand, functional training – which replicates movements that stress the hamstring during competition, has been shown to significantly reduce the risk of injury. This includes such things as practicing bending to pick up the ball whilst running, short sprints and direction changes. Core stability exercises have also been used successfully in programs to reduce the rate of hamstring injury, as well as helping to protect against many other sporting injuries.



**ABOUT THE AUTHOR: Mat Prior**

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Mat graduated in 2006, and has worked at The Queen Elizabeth Hospital for the past 3 years, also serving as an undergraduate clinical educator to students at TQEH in addition to undertaking a patient caseload. Mat has a keen interest in sports, and currently plays soccer in the Collegiate League in SA.

His clinical interests are hamstring injury, knee/ACL injury, shoulder injury.