

# 7 1/2 SECRETS you MUST Know About Soccer Injuries

and how to get back on the field faster

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# **INTRODUCTION**

### Have you injured yourself?

### Want to return to play in the least amount of time?

Have you sustained a soccer injury and become frustrated with time away from the pitch?

Whether you are a local soccer athlete or just out for a run with your mates, you need to attend for an injury assessment.

Our physiotherapists conduct thorough consultations to inform you of the best protocol for your injury, for example whether you should or shouldn't train. We will give you the best advice in order to get you back onto the field to play in the shortest possible time. We will equip you with the must-know exercises to ensure your injury goes away, as quickly as it came along!

This is specifically for injuries that you have acquired during games throughout the season. The aim of treatment is to give you the best advice and information about getting the best outcome for your injury. It is also a good opportunity to come in and get an opinion on little niggling injuries that are keeping you from playing your best game of soccer. Let us help you be your best on the field!

In this report, we will reveal the 7 1/2 secrets you must know to reduce soccer injuries and return to play faster.

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#### Know the soccer injury facts.

Soccer challenges physical fitness by requiring a variety of skills at different intensities. Running, sprinting, jumping & kicking are important performance components, requiring maximal strength & anaerobic power – therefore this sport also has high injury rates

Hamstring injuries are the most common muscle injuries in soccer and they have a high rate of recurrence.

A recent review of the literature revealed that the incidence of injury during football games tended to increase with age across all age groups, with an average incidence of 15 to 20 injuries per 1000 hours of match play among players older than 15 years

Recent studies have shown that recreational football can improve metabolic, cardio-vascular and musculoskeletal parameters and can therefore be an effective tool to prevent against certain lifestyle diseases such as diabetes and obesity – therefore we want to keep playing for as long as possible!

Sprains and strains are the most common lower extremity injuries – with 50-80% of injuries in soccer affecting the lower limb (feet & legs). The severity of these injuries varies.

Shin splints (soreness in the shin), patellar tendinitis (pain in the knee), and Achilles tendinitis (pain in the back of the ankle) are some of the more common soccer over-use conditions. Soccer players are also prone to groin pulls and thigh and calf muscle strains

The incidence of match injuries is, on average, 4-6x higher than the incidence of injuries that occur in training sessions

It is estimated that, on average, every elite male soccer player incurs approximately one performance limiting injury each year with between 9 and 34% being classified as "over-use" injuries

Intervention programs such as FIFA 11+ focusing on intrinsic risk factors for specific injuries have achieved significant reductions in soccer injuries. The data shows that significant reductions in ankle and knee ligament sprains as well as muscle strains are possible when complying with such a program.



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### Soccer Injury prevention Technique factors/fatigue.

At times, many players may increase intensity of play at the end of game, especially when motivated by possible loss, leading to increased player fatigue. In fact, most injuries occur in the last 1/3 of a half.

The combination of increased intensity and fatigue often leads to more fouls, which the UEFA injury study consistently found to increase injury risk. Fouls against you are hard to control, but you can certainly decrease the risk factors of fatigue.

Poor running technique and improper footwear for your biomechanics also increase the incidence of injury, particularly overuse injuries. A thorough assessment using a computerised GaitScan can help to identify if you are more at risk at developing injuries due to poor foot biomechanics.

Improper muscle length in hamstrings, calves and your quads, especially combined with fatigue significantly increase your chances of injury.



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### Warm up correctly and include proprioceptive training.

Specific exercises during the warm-up focusing on the athlete's body awareness in space has been shown to decrease the risk of injury – with one study showing an unconditioned group of athletes had a 34% incidence of injury compared to the specific warm up group which had a 14% incidence of injury

The purpose of the warm-up is to enhance performance by physiologically and psychologically preparing the body for competition while at the same time reducing the risk of injury.

Many soccer specific injury prevention programs have been created. We recommend the FIFA11+ program as it has soccer specific skills and exercises incorporated into the program. The overall risk of injury in the teams that performed the 11+ was about 30% less than that of the control group that did not perform any specific warm-up.





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Wear the correct footwear and understand the different playing surfaces.

#### **FOOTBALL BOOTS/PLAYING SURFACE:**

Boot outsoles can differ significantly in terms of stud shape, length and position on the shoe outsole. This helps to augment player traction and performance for a given playing surface or different climatic conditions. Playing surfaces are broadly categorised into natural or artificial. However, there are many different varieties of each, based on new generations of artificial turf, engineered grasses and soils. Subtle variations in



natural turf are also important as altering the grass variety, soil type, lateral root growth (thatch) and moisture may influence the resultant traction forces and hence injury risk. It is therefore important to examine shoe-surface interactions and the associated traction and their relation to injury risk. Specific stud patterns have been shown to increase the risk of ACL injuries.

One common mechanism associated with injury in the football codes is rotation on a planted foot coupled with high levels of traction at the shoe-surface interface. In this case, studs on the football shoe can become 'trapped' in the grass of the playing surface, with the resulting rotational forces or torque shifted proximally to the ankle, knee or other joints.

Within these, footwear is the factor most under the athlete's control and amenable to modification. High rotational traction at the shoe-surface interface was associated with a 2.5 times higher risk of injury to the lower extremities. Turf shoes with several very short studs or cleats consistently displayed lower rotational traction forces at the shoe-surface interface than other stud configurations. Sand-based natural grass displayed higher rotational traction force measures than soil-based natural grass surfaces.

For Artificial Grass (AG) pitches there are now specific boots designed for these surface that have different studs help to reduce these forces. Look for football boots with an AG code descriptor.



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#### Know when to use ankle braces and strapping.

#### **ANKLE BRACES:**

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Recent studies have shown that a semi rigid ankle brace significantly reduced the incidence of ankle sprains in players with a previous history of ankle sprain by 30% for 6-12 months after the injury. External ankle supports and strapping can prevent ankle sprains during high risk sporting activities such as soccer, especially in individuals who have a previous history of ankle sprain.

Ankle braces in combination with specific exercises (e.g. using an ankle disc or wobble board) seems to be very promising for reducing the risk of ankle injury. A study has shown that proprioceptive improvement occurs for up to 36 weeks after your injury, so you need to do your rehab.



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Include strength and mobility training

#### LOAD MANAGEMENT/ OVERUSE:

Fixture congestion, or playing multiple games in a short amount of time, appears to be related to higher injury risk – particularly in younger athletes.



#### **STRENGTH/POWER & MOBILITY TRAINING:**

In professional male soccer players, a 10-week strength training program (1–2 days/week) that emphasized an eccentric overload reduced the incidence of hamstring strains from 67% in the control group to 20% in the intervention group.

Some of the known risk factors for chronic groin pain include pelvic instability, adductor muscle imbalance, reduced hip join range of motion, delayed core stability, and previous groin injury – all of these risk factors can be eliminated through a specific exercise program.

Adequate recovery time and managing other sporting activities that ad to overall load are also important.



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Understand your injury risk factors.

#### **PREDISPOSING FACTORS:**

E.g. previous history of injury, sedentary lifestyle, hobbies (e.g. gardening)

These factors must be taken into consideration as well as load management to ensure decreased risk of further injury.

However specific to previous injury being a risk factor, one would assume the new injury to be a re-injury but the data showed otherwise, that any previous injury to other muscle groups in the lower extremity increased injury rates e.g. A thigh strain could be the precursor to a ligament injury in the knee; therefore, the whole leg should be rehabilitated, not just the thigh.

Any side-to-side discrepancies/weaknesses will be identified in your initial one-on-one screening with your Physiotherapist – this will be used to prescribe your individual exercise program in order to correct these weaknesses.



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# **SECRET 71/2:**

Pre-session Assessment. Only half a secret because it is common sense.

#### **PRE-SEASON ASSESSMENTS:**

Typically performed by a Physiotherapist with knowledge of the biomechanics of soccer training and involves specific strength and flexibility testing. These assessments are used to help identify physical deficiencies that if left untreated compromise performance may or potentially cause injuries.

**OFFER:** As a special invitation from the team at Turramurra Sports & Spinal Physiotherapy and to thank you for reading this report and to help you stay injury free this year, we are offering a FREE INITIAL INJURY ASSESSMENT during the football season.

You must mention this offer at the time of booking.

D ۵ **Foot or Knee** 

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**Problems?** Hip, Back or **Shoulder Pain? Muscle Pain?** 

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