

# INJURY PREVENTION GUIDE

This guide has been put together in collaboration with <u>Mobilize Sports Therapy</u>, a sports chiropractic office based in Redwood City.



# **BACKGROUND ON MOBILIZE SPORTS**

My name is Dr. Sterling, and I am a former pro soccer player. It is now my passion to help players return to sport from injuries and also train to mitigate future injuries and enhance performance on the field. I wanted to create something for players with information I wish I knew when I was younger that might've helped me stay more injury free and perform better at my sport. I hope you find it helpful!



Sterling (#2) with the US Futsal National Team

# **HOW TO NAVIGATE THIS GUIDE**

- This guide includes four injury prevention exercises that should be done both in-season and during the off-season, 1-3 times per week.
- The heading on top of each picture is a link to a Youtube video demonstrating how to perform each exercise.





## EX. #1 - SQUAT/HIP MOBILITY + THORACIC ROTATION

Getting into a deep squat position requires joint mobility at the ankle, knee, hip, and trunk - all crucial ranges of motion required for kicking, volleys, controlling the ball out of the air, jumping, changing direction, etc. Being able to strength train through a full range of motion will stress the muscles and tendons more optimally and lead to better force generation. This is why having the requisite mobility throughout the lower kinetic chain is so important to a soccer player. See if you can get to the bottom of the squat while keeping your heels down and your torso upright. If this is challenging for you there are many ways we can work to improve this.

#### **WATCH THE VIDEO DEMONSTRATION**







## EX. #2 - SINGLE LEG SQUAT

Virtually all actions for soccer are performed on one leg. Reducing valgus stress (the knee caving inward during knee flexion) via lateral hip and thigh strength is an important component for improved biomechanics and reduced injury risk. To maintain the juxtaposition between the femur and tibia during a single leg squat, significant demands are placed particularly on the gluteus medius muscle which helps pull the knee out of valgus collapse. Developing strength and neuromuscular control through the lateral hip can help with preventing dynamic valgus during non-contact cutting actions (the most common mechanism of ACL tears in soccer players).

#### WATCH THE VIDEO DEMONSTRATION



### **Supporting Article:**

<u>Dynamic Knee Valgus in Single-Leg Movement Tasks. Potentially Modifiable Factors and Exercise Training Options. A Literature Review</u>





## EX. #3 - HAMSTRING NORDICS

The hamstring is a frequently injured area in soccer players which also can result in a lengthy spell on the sidelines. Recurrent injury rates are high (estimated between 14-63%) so it is better to be proactive and do as much as you can to mitigate future injury risk. This is a highly challenging exercise but you can change the difficulty by the height you go down to and also by how much you use your arms to get back up.

#### WATCH THE VIDEO DEMONSTRATION



## **Supporting Articles:**

<u>Effect of Injury Prevention Programs that Include the Nordic Hamstring Exercise on Hamstring Injury Rates in Soccer Players: A Systematic Review and Meta-Analysis</u>

<u>Acute hamstring injuries in Swedish elite football: a prospective randomised controlled clinical trial comparing two rehabilitation protocols</u>

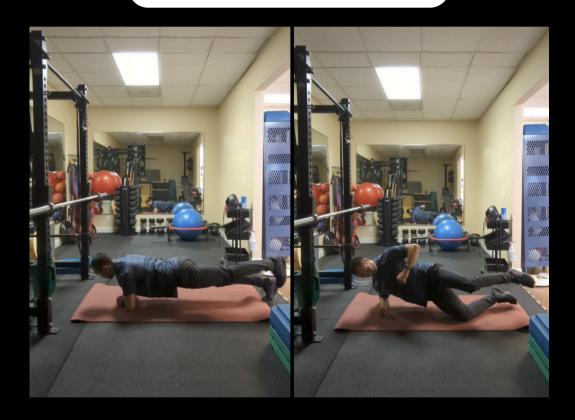




## EX. #4 - CORE STABILITY / PLANK VARIATIONS

Building up core stamina and endurance is critical for many athletic events, especially soccer players playing in a 90 minute game. The core muscles of your trunk that stabilize the spine are designed to resist motion. Creating proximal stiffness and stability in the trunk will allow you to unleash distal athleticism through the limbs (particularly the legs) for explosive changing of direction, kicking, and jumping. Core stability can affect many factors beyond the trunk, including reducing ACL tear risk. Notice in these exercises the rib cage and trunk is locked in position relative to the pelvis, and the only motion occurs at the ball and socket joints of the hip and shoulder.

#### WATCH THE VIDEO DEMONSTRATION



## **Supporting Article:**

<u>Effects of pelvic and core strength training on biomechanical risk factors for anterior cruciate ligament injuries</u>





# **NOTE FROM MOBILIZE SPORTS**

If you are struggling with a nagging injury or looking to feel your best to perform at your highest level, we can help. For an in depth assessment and evaluation with comprehensive individualized exercise programming and performance manual therapy, or a <u>free 15 minute phone consultation</u> to see if working with Dr. Sterling is the right fit for you, kindly request an appointment on our website or give our office a call.

Common soccer conditions we see in office and provide treatment and return-to-play exercise programming for:

- Lateral/high ankle sprains
- Plantar fasciitis
- Shin splints
- Achilles/patellar/psoas tendinopathies
- Concussion prevention
- Calf/hamstring/quadriceps strains
- Turf toe, metatarsalgia, bunions
- IT band syndrome
- Strength training coaching
- Learning safe and sustainable form for the squat, deadlift, etc



 $M \odot B I L I Z E S P \odot R T S$  chiropractic and manual therapy, inc. Get up and move

Dr. Sterling Hancock, D.C.
536 El Camino Real Redwood City, CA 94063
Phone: (650) 995-7243
www.mobilizesports.com/meet-dr-sterling-hancock
IG: @drsterlz

All content is created for informational purposes only. It is not intended to be a substitute for professional medical advice and should not be relied on as health or personal advice.