

# Effects of Incrediwear® Recovery Leg Sleeves on Time-Loss for Major League Soccer Players

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## **Introduction & Purpose**

- Every season Major League Soccer (MLS) players are injured, resulting in time-loss.
- Strains and sprains accounted for 37% and 19%, respectively, of all injuries during two competitive seasons.1
- 92% of muscle injuries in MLS players occurred in the lower extremities.<sup>2</sup>
- To enhance recovery, professional athletes have begun wearing Incrediwear® recovery sleeves, but their effectiveness is unclear.

## INCREDIWEAR

- Incrediwear® sleeves release negative ions from body heat, causing molecular vibrations thereby increasing blood flow (http://www.incrediwear.com)
- **PURPOSE:** To investigate the *effects of* wearing Incrediwear® leg sleeves on time**loss** for *professional soccer players*.

### **Methods**

Study Design: Retrospective Review of injury reports from one MLS team in 2015 and 2016

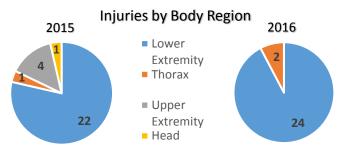
**Subjects:** 2015 season (n = 31, no Incrediwear®) and 2016 season (n = 28, using Incrediwear® protocol)

Data Analysis: After outlier removal, t-tests compared missed games and events between 2015 and 2016

## Incrediwear® Protocol (2016):

- 1. Injured players: minimum 1 hour before and 1 hour after practices/games
- 2. All players: during travel days
- All players: a minimum of 1 hour posttraining if players trained at least 10% over their norm in distance, high speed running, and/or accelerations/decelerations.

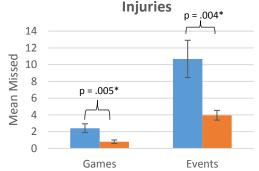
#### Results



Types of Lower Extremity Injuries

| Types of Lower Extremity injuries |      |      |
|-----------------------------------|------|------|
|                                   | 2015 | 2016 |
| Strain                            | 12   | 13   |
| Sprain                            | 3    | 4    |
| Tightness                         | 0    | 4    |
| Soreness                          | 0    | 1    |
| Muscle Pain                       | 1    | 1    |
| Bone Contusion                    | 1    | 1    |
| Fracture                          | 2    | 0    |
| Internal Injury                   | 2    | 0    |
| Nerve Irritation                  | 1    | 0,   |
|                                   |      |      |

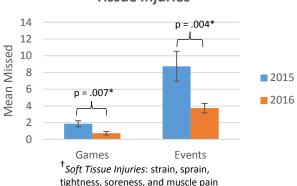




#### **FINDINGS**

2016 players missed significantly less games and events for lower extremity injuries and lower extremity soft tissue injuries than 2015 players.

#### **Time-Loss: Lower Extremity Soft** Tissue Injuries<sup>†</sup>





### **Conclusion**

- Incrediwear® recovery leg sleeves may help reduce time-loss in professional soccer players after *lower extremity* injuries and lower extremity soft tissue injuries.
- The reduction in time-loss could be due to increased blood flow, which could accelerate recovery.

### References

- Hawkins RD, Hulse MA, Wilkinson C, Hodson A, Gibson M. The association football medical research programme: an audit of injuries in professional football. Br J Sports Med. 2001;35(1):43-47
- Ekstrand J, Hägglund M, Waldén M. Epidemiology of muscle injuries in professional football (soccer). Am J Sports Med. 2011;39(6):1226-1232

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