# INCREDIWEAR®

Fewer Muscle and Lower Extremity Injuries for FC Cologne Players



## Introduction

In each Bundesliga season, clubs have to contend with downtime of injured players, which does not always result from direct contact with opponents, but rather from a lack of physical regeneration. The number of muscular injuries, especially in the lower extremities, is growing steadily. More than 1500 times Bundesliga players were forced to take a break in the season of 2017/2018, with injuries mainly affecting the thighs / calves (36.3%), knees (15.1%) and ankles (13.8%).

In order to achieve an improved regeneration, the players of the FC Cologne pro team wore Incrediwear Recovery clothing in the season of 2018/19. They wore these products both in the rest/sleep phases as well as in the training units.

Investigation of the Effects of Wearing Incrediwear® Products for Improved Recovery and Reduction in Player Downtime

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## **Technology Overview**

Incrediwear technology incorporates the semiconductors germanium and carbonized charcoal into the fabric. When activated by body heat, the elements release therapeutic negative ions and infrared waves. Unlike restrictive compression products, Incrediwear increases blood flow through contact with the skin and facilitates healing, pain relief and reduced swelling through generation of a micro electromagnetic field which drives an increase in circulation.

## **Purpose**

To investigate the effects of wearing Incrediwear sleeves and braces for improved recovery and reduction in player downtime.

#### Methods

**Design:** The professional team (25 players) were equipped with Incrediwear braces and sleeves.

### For the rest, travel and sleep phase:

 Performance Pants (leggings), Circulation Shorts, Sport Socks, and Circulation Socks

#### For acute injuries, chronic complaints, rehabilitation, pre-/postoperative:

 Leg Sleeve, Ankle Sleeve, Knee Sleeve - Body Sleeve, Calf Sleeve, Back Brace, and Hip Brace

At the end of the season, a questionnaire was handed out to the players by the medical department for subjective evaluation. In addition, the injury statistics were evaluated in comparison to the previous season.





#### Results

#### The questionnaire survey gave the following results:

#### 1) Higher Quality and Comfort

The Incrediwear products were reported to have a very high quality and comfort when worn by the players. The products can be used without restriction in the active or passive phase by the players and showed high acceptance and adherence among players.

#### 2) Subjectively Improved Regeneration and Recovery

After a longer sleep phase (overnight), the players experienced subjectively improved regeneration of stressed muscles. After intense training sessions, this was reported by "lighter legs" and "less muscle pain". In the case of acute injuries (ligament distension, stowage), a rapid, optically visible swelling of the affected area is observed. Incrediwear helped to optimize the effects after therapeutic treatments and to increase range of motion.

#### 3) Improvement of Symptoms

Players with chronic discomfort reported a noticeable reduction in pain, coupled with improved mobility in the affected area. Players with groin discomfort reported significantly less local pain after getting up and improved gait after wearing an Incrediwear Hip Brace overnight.

#### Conclusion

The Incrediwear products help to improve players' recovery, provide effective regenerative supplementation on travel days and generally reduce muscular issues and were reported to have high ease of use and comfort.

When using the Incrediwear Sleeves (Ankle, Knee, Calf or Elbow Sleeve), researchers found faster edema absorption and pain improvement in the case of acute injuries. Incrediwear was found to be essential as a complementary product after therapeutic treatments and for healing and recovery.



Researchers found high comfort, ease of use and quality of products, improved muscle regeneration, less muscle pain, reduction in chronic symptoms and improved mobility of the injured or painful area, and less player downtime.

**Extremity Injuries** 

