

# Case Study

## Training and Rehab of a Professional Athlete

For The Long Run

**WOODWAY**

### Athlete Overview

Brad plays Arena football as an offensive and defensive lineman and is seeking off-season training to prepare for upcoming free agent tryouts. He is looking to improve his speed, agility, and power. Brad has a history of knee injuries, including a reconstruction of his Posterior Cruciate Ligament (PCL) on his left knee during his Division I college playing career, and a non-repaired tear of his right PCL several months prior to the start of his training. Brad was able to utilize the Woodway ELG treadmill, iMett testing equipment, and the EXSpeed™ high speed treadmill training program to his advantage.

### Athlete Needs

Brad has a long history of training while playing professional, college, and high school football for many years. Brad feels weak, deconditioned, and slow following a long Arena season, including an knee injury. He must be ready to perform at a high level in front of professional scouts in the 10 and 40 yard dash. These are the two areas that he feels he is lacking to really impress scouts.

While speed is Brad's main concern, lower body strength, power, and flexibility must also be addressed for the performance and well being of the athlete, due to his PCL deficiency.

### Program

The ELG treadmill, iMett metabolic testing unit, and EXSpeed™ training programs offer the perfect blend of training to meet this athlete's needs. Brad enrolled in an eight week training program consisting of 3 workouts per week. His initial evaluation showed strength and power differences between his right and left leg, a 40 yard dash time of 5.99 sec., and a rather poor ratio of Anaerobic Threshold (AT) to Max Heart Rate, showing an overall lack to conditioning.

Brad was placed in a program which included the EXSpeed™ treadmill sessions, ground based sprint workouts, plyometric and agility workouts, functional strength training, flexibility training, and core stabilization.

The EXSpeed™ sessions included multiple runs at various speeds and elevations (running up-hill) to improve power output, stride frequency, running mechanics, knee drive, core stability, and lactic acid tolerance to improve conditioning. Because of the nature of the tryout format, recovery conditioning was not a big concern, so Brad was allowed to recover to 75% of his AT Heart Rate in between runs to allow for maximum recovery and speed improvement.

### Training Results

After 8 weeks of training, including just 7 treadmill workouts within the EXSpeed™ program, Brad showed impressive results. His 40 yard dash time dropped from 5.99 sec. to 5.54 sec. with his 10 yard dash dropping dramatically as well. Brad acknowledges that he now moves more fluidly and labors much less with athletic movements. "If I only could have done this years ago, who knows where I could be today?", he comments. And, most important of all, Brad signed a free agent contract to play another season of Arena football.



#### At a Glance:

##### Athlete:

- Professional Football Player
- Off./Def. Lineman
- PCL Deficient
- Seeking speed training for Pro Tryouts

##### Goals:

- Improve Sprint Speed
- Improve Conditioning
- Rehabilitate Weak Knee
- Sign Free Agent Contract

##### Evaluation:

- 10 yd Dash: 1.97 sec.
- 40 yd Dash: 5.99 sec.
- Single Leg Power Rating:
  - R: 15.71
  - L: 17.71
- VO<sub>2</sub> MAX: 53mL/kg/min
- AT/Max HR Ratio: 88.8%
- 2 min. Recovery/AT HR Ratio: 82.6%

##### Training Plan:

- EXSpeed™ Treadmill Program
- Ground Based Sprint Workouts
- Functional Strength Training

##### Training Equipment:

- Woodway ELG Treadmill
- iMett Metabolic Testing Unit

##### Training Results:

- 10 yd Dash: 1.76
- 40 yd Dash: 5.54
- Improved conditioning
- Improved Movement Skills
- Signed Free Agent Arena