



Kick-Off

By Soccer Fitness Gols

Spring 2014

IN THIS ISSUE: HOW TO TAKE YOUR PASSION FOR SOCCER AND CHOOSE THE RIGHT EXERCISE ROUTINE TO REACH YOUR GOLS

Love the game. Reach your gols.

By Richard Bucciarelli

In 2011, my brother and I founded Soccer Fitness to provide science-based training programs to competitive youth soccer players in and around Toronto, Canada. Our training programs include soccer-specific exercises, are customized to our athletes' fitness level and goals, and incorporate continuous performance monitoring.

As our company grew, we noticed something interesting: the family and friends of the soccer players we were training were as interested in the fitness programs as the soccer players themselves. Time and again, we were asked how ordinary people could adopt the same type of training to lose weight, get stronger, and regain the level of fitness they had when they were younger.

We know how busy life can get, with work, family, and other commitments draining your time and energy. We also know how important regular exercise is to staving off chronic disease and improving your quality of

life. This is why we decided to create Soccer Fitness Gols, the first mobile app offering customized fitness programs built on soccer-specific sports science that fit easily into your hectic lifestyle.

We believe **Soccer Fitness Gols** can help you achieve your fitness "gols" because we offer:

- Soccer-Specific Training:** Our programs are designed to improve the critical components of soccer fitness, such as strength, power, endurance, speed, and flexibility. We are leveraging over 15 years of experience working with soccer players to ensure our programs not only deliver results, but are also challenging and fun. Training like a soccer player also offers several other distinct physical and physiological advantages. It improves cardiovascular health, and can significantly reduce the risk of developing heart

disease. Furthermore, because the primary muscles trained are the large leg muscles, there are significant increases in weight loss, fat loss, and in the development of total body muscle mass, that are seen with soccer-specific fitness training.

- Customized Programs:** Our programs are customized to your level of fitness. When you download a program, the first step is to complete a fitness assessment. We use the basic functionality of your smartphone, such as GPS and accelerometry, to run the assessment. Based on your results, we tailor the program with specific targets for the desired numbers of repetitions and time durations of each exercise, just for you. As you progress through the program, you will complete periodic assessments to track your progress. Each time your level of fitness improves, the workouts and the targets get more challenging, so that you are always being pushed

to reach your true potential with every workout.

- **Performance Monitoring**

Whenever you complete an assessment, whether at the start, middle, or end of a program, we allow you to compare your results with your peers according to your age and gender. Over time, you can chart your progress across the various components of fitness, and select programs to target the components you want to improve. Because the assessments are simple, quick and easy to do, and we have included them every 2 weeks as part of each training program, you will constantly be able to check and monitor your progress and performance, so that you are never confused about where you stand or how you are doing.



- **A Practical Workout Schedule**

All of our programs are made up of two workouts per week, and each workout is designed to take approximately 30 minutes to complete, so that they can easily fit into even the most hectic schedules. Also, because each workout is only 30 minutes in duration, individuals with a bit more workout time can easily fit in 2 or even 3 different workouts (for example: 30 minutes of endurance, 30 minutes of strength, and finally 30 minutes of flexibility) into the same day. Any combination or frequency of workouts is acceptable in the system, so that everyone from the weekend warrior to the elite athlete can create and customize and create their own training schedule that fits their lifestyle. What's more, our workouts do not require any special equipment, just you and your smartphone.

at www.soccerfitnessgols.com, and start receiving free information about the latest trends in soccer fitness through our blog and newsletter. If you have any questions, comments, or suggestions for us, please check us out on Facebook at www.facebook.com/soccerfitnessgols and on Twitter @Soccerfitgols.

We look forward to helping you achieve your "gols"!

Richard and Robert Bucciarelli are the co-founders of Soccer Fitness Gols Inc., a company created to help soccer players, coaches, and fans achieve their fitness "gols" through their love of the Beautiful Game, and the developers of the Soccer Fitness Gols mobile fitness app. For more information please visit www.soccerfitnessgols.com.



Beta Screenshot for Soccer Fitness Gols Mobile App

The first release of **Soccer Fitness Gols** will be available for download on Android smartphones through Google Play beginning in June 2014. However, we didn't want to wait until June to start providing information and tools to help you start achieving your fitness "gols". You can join the **Soccer Fitness Gols** community today

Improve Your Sprints Using High Speed Treadmills

By Richard Bucciarelli

A Pilot Study by Soccer Fitness:

Soccer Fitness Inc. has recently received confirmation that we have been accepted to present the results from our study 'Effectiveness of Ground Based vs. Treadmill Based Repeated Sprint Training on Sprint Time and High Intensity Running Ability in Youth Female Soccer Players' at the 4th World Conference on Science and Soccer, to be held in Portland, Oregon, on June 5th-7th, 2014. Our research revealed some exciting new information about using high speed, high incline treadmill running. After 6 weeks of training, we were able to determine that our own high speed/high incline treadmill training protocols are more effective at improving running speed and endurance, as compared to more traditional ground-based running training. Below is a summary of our study and its findings, as well as some important ramifications for youth soccer coaches and fitness coaches.

Introduction:

In Canadian youth soccer, the pre-season period prior to the outdoor season typically comprises 6-8 weeks, beginning in mid-to-late March and ending in mid-to-late May. Repeated sprint training, consisting of 10 or more repetitions of high/maximal intensity runs/sprints, is a commonly used training method during soccer pre-season. This type of training is especially useful during pre-season because it has been shown to improve both speed, as well as high intensity running ability. Studies done on soccer players, as well as athletes in other sports, have demonstrated the effectiveness of a "ground-based" (running sprints on the ground) repeated sprint training protocol on improving speed and high intensity running ability.

Why do Treadmill Training?:

High speed/high incline treadmill training (using specialized high speed running treadmills) is an alternative method of performing repeated sprint training. At Soccer Fitness, we decided three years ago to make repeated sprint training using high speed/high incline treadmill running the focus of our strength and conditioning programs at our new facility, the Soccer Fitness Training Centre. We reasoned that, as compared to "ground based" training, high speed/high incline treadmill training was more advantageous in that the workloads (speed, and % incline) could be more closely controlled. Treadmill training also holds other advantages over ground-based training, including the addition of a spotter, who can help the athlete perform higher speed runs than could normally be completed, by spotting/pushing on the athlete's lower pelvis.

Our Study:

We believe so much in our training protocols that, during the spring 2013 pre-season, we decided to put our training to the test, by conducting a 6-week training-based study,

comparing two different kinds of repeated sprint training (our incline treadmill protocols, versus a more conventional and previously used ground-based running protocol). To date, there have not been any studies comparing a ground-based versus a treadmill-based protocol for repeated sprint training on youth soccer players. The aim of this study was to examine the differences in speed and high intensity running ability following a 6-week, 2 days per week repeated sprint protocol of ground-based versus treadmill based repeated sprint training.

Methods:

Subjects participating in this study were female members of a local Toronto area youth soccer club, aged 14-17, that were randomly assigned to Treadmill Training ("TT") vs. Ground-Based Training ("GBT") using simple computer-generated randomization. 9 players in total participated in the Treadmill Training Group, and 8 players in total participated in the Ground-Based Training group. Both groups performed a 6-week, 2 sessions per week repeated sprint training protocol, comprising 15 repetitions of a 6-second maximal effort, with 60



seconds of passive recovery in between. At baseline, the TT vs. GBT groups were comparable with similar times in 10m, 20m and 35m sprint tests. Improvement in sprint performance was assessed following 6 weeks of training by comparing the different in sprint times pre- and post-training.

Results:

Following 6 weeks of training, girls randomly assigned to TT had significant improvements in 10m, 20m and 35m sprint performance. There was no difference in distance covered pre- and post- test between TT and GBT in the Yo-Yo Intermittent Recovery Test. When evaluating program effectiveness, there was a significant improvement in player performance in the TT group for all tests post-training (10m, 20m, 35m sprint and Yo-Yo Intermittent Recovery Test). The GBT group showed improved performance in 35m sprints and the Yo-Yo Intermittent Recovery Test, but not in the shorter sprint distances (see Figure 1 for a further explanation of these results).

Conclusions / Discussion:

Results of the study indicated that Treadmill Training produced a significantly greater increase in running speed, with a small – but also greater – increase in high intensity running ability, than On-Field Training. When considering the results of this study, as well as the other aforementioned benefits of Treadmill Training, it appears that Treadmill Training is at least as effective, if not more effective, as a method of pre-season repeated sprint training, than On-Field Training. At Soccer Fitness, these results impressed us so much they prompted us to make similar changes to our own Treadmill and Plyometric Training Protocols. More research, involving larger sample sizes, is required before definitive conclusions can be made.



High Speed Incline Treadmill at the Soccer Fitness Training Centre, Vaughan, Ontario

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- Julia Burgess, Head Coach, SC Toronto 1998 Girls
- Mario Consiglio, Head Coach, SC Toronto 1995 Girls
- And all the players from the SC Toronto 1998 and 1995 Girls

Richard Bucciarelli is President of Soccer Fitness Inc., a company that provides soccer-specific strength and conditioning to individuals, teams, and clubs in the Greater Toronto Area. Beginning in August, 2013, the Soccer Fitness Training Centre will be offering brand-new Treadmill and Plyometric Training Programs. For more information about Soccer Fitness Inc., please visit www.soccerfitness.ca.

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