

## **Dynamic Flexible Warmup For Soccer**

*"The aim of the warm up should be the complete physical and mental preparation for dynamic actions to follow. The athlete should be able to begin the game or training session totally ready to perform at maximal intensity if required."----- Faccioni*

It is commonly accepted that warm up activities in soccer are essential for minimizing injuries and improving performance on the field. However, the typical warm up activities used by most soccer coaches are not ideal for achieving these essential goals. This warm up usually includes an initial jog around the soccer field, followed by 10-15 minutes of static stretching, and ending with some skill activity before the training session or game. However, This method of preparing a soccer player for a dynamic sport activity such as training or participating in a match appears to have major physiological limitations

### **Physiological reasons for a warm up:**

The main physiological reasons for a warm up are:

- To increase the core temperature at least one or two degrees Celsius
- To increase heart rate and blood flow to skeletal tissues which improves the efficiency of oxygen uptake and transport, carbon dioxide removal, and removal and breakdown of anaerobic byproducts
- To increase the activation of the Central Nervous System (therefore increasing co-ordination, skill accuracy and reaction time)
- To increase the rate and force of muscle contraction and contractile mechanical efficiency (through increased muscle temperature)
- To increase the suppleness of connective tissue (resulting in less incidence of musculotendonous injuries)

The result of these physiological responses to warm up activities leads to an athlete's increased ability to perform physical work. This is very important for sports such as soccer which require athletes to perform high intensity bouts of work such as jumping and sprinting. Additionally, the improvement in the nervous system is especially helpful for soccer athletes who are also required to perform high levels of complete body movement.

### **Limitations of the Typical Soccer Warm up**

The major criticism against the typical soccer warm up is that it does not adequately prepare the athletes for the ensuing training and playing demands of the sport of soccer. The reasons for this inadequate preparation are:

- The initial jog which usually consists of slowly jogging forward and in a straight line has a minimal effect on increasing the body temperature of the athlete.
- The static stretches that are performed are usually done slowly with the athlete either standing still or sitting on the ground. It has been shown that this method of stretching is beneficial to increasing limb range of motion, and its main goal is to relax the muscles so

that they are less resistant to passive stress for stretching. However, this type of passive stretching does not adequately prepare the muscle and connective tissue for the active contraction and relaxation process that occurs in a dynamic soccer training or game situation

- The body loses the increase in temperature gained by the initial jog during the static stretching period especially in cold climates or cold sessions (Autumn and Winter).

The net result is that the typical soccer warm up can lead to less than optimal speed and skill especially at the start of the match. Therefore, the soccer warm-up should be altered in such a way that it meets the dynamic demands of the sport. Accordingly, the aim of the warm up should be the complete physical and mental preparation for dynamic actions to follow. The athlete should be able to begin the game or training session totally ready to perform at maximal intensity if required (Faccioni, 2004).

### **Dynamic Warm up for Soccer**

The following is an example of a dynamic soccer warm up that is designed to raise the body temperature, increase muscle elasticity and neuromuscular function, and mimic the actions used in training and competition. It is performed in three stages starting with general exercises and ending with soccer specific activities.

### References

Goldstein, B., & Kontor, K. (2002). How to make your soccer field a conditioning facility. Performance Soccer Conditioning. Lincoln, NE: Ken Kontor

Faccioni, A. (2004). Dynamic Warm up Routines for Sports. Faccioni Speed and Conditioning Consultancy.

Critchell, M. (2002). Warm Ups for Soccer: A Dynamic Approach. Spring City, PA: Reedswain

## Warm-up for Soccer

### 3-Step Warm-up

**Step 1 - Aerobic activity:** Perform a five minute, low-level aerobic, such as jogging, or technical work with the ball

**Step 2 - Dynamic Flexibility:** These exercises incorporate active movements to stretch the hips and pelvic region targeting hamstrings, hip flexors, gluteus and groin, which are important injury prevention in soccer. Do the following movements five times for each side or position:

- **Hip Circles:** Hands on hips, thrust pelvic out and rotate in a large circle (hula hoop style)
- **Trunk Twist:** With stationary pelvis, rotate at the trunk looking over the shoulder in the direction you are stretching.
- **Alternate Toe Touches:** With legs wide apart, alternate touching hand to the outside of the opposite little toe.
- **Knee to Chest:** Standing pull one knee to chest and hold for a three count. Reverse position.
- **Heel to rear:** Pull heel to rear and hold for a three count.
- **Cradle Walk:** Externally rotate leg, pulling the leg up at the ankle. Release and repeat taking a step.
- **Lateral Lunge with Twist:** Step laterally and lower the body to form a 90-degree bend in the knee. Rotate the torso to the extended leg side. Trail leg is straight stretching the groin area.
- **Forward Leg Swings**
- **Lateral Leg Swings**
- **Hand Walks:** Starting in a push up position , walk feet up to hands, then walk hands out to a push up position and repeat keep back flat.

**Step 3 - Movement Preparation:** Exercises that imitate specific activities **performed over a 20-yard distance**

- **Jog Forward**
- **Back Pedals**
- **Skip Forward/Backwards**
- **Jog Forward and circle arms forward**
- **Jog Forward and circle arms backwards**
- **Lateral shuffles**, arms side-to-side crossing over body
- **Carrioca:** standard X-Overs
- **Power skips**
- **scissors kicks**
- **Forward shuffle:** Open hips, lift leg high externally, rotate hips stepping to 45-degrees. Recover and repeat with opposite leg. Perform with skipping motion
- **Hip Crossover:** Swing leg high upwards and inwards, rotating on forward leg and pivoting on planted leg, ending up facing the opposite direction. Repeat with opposite leg
- **Back Drop Ground Touches:** Shuffle backwards 45-degrees touching the ground. Recover and repeat opposite side
- **Defensive back shuffles**
- **Wheat Pickers**
- **Heels to rear**
- **High knees**
- **Line steppers**