

## **Abstract**

### **Goal**

The aim of our experimental study to combine one resistance-training exercise (Bulgarian Split Squat Exercise) with three types of stretching exercises (static, dynamic, and combination stretching exercises) to find which protocol has positive effective in improving the short-sprint time performance in 20 meters for semi-professional college football players in five sessions in acute term- phase (10days).

### **Methodology**

The number of participants was 20 male healthy semi-professional college football players. They were all between the age of 18 - 30 (means 25.5). All participants played football in different positions in each group included defenders, attackers, midfielders, wings position, and they were choosing randomly to each group from these positions. They were asked by the main researcher personally to participate in the experimental study. The place of the intervention program was at the Faculty of Physical Education and Sport. The program lasted for ten days in five sessions, each group had a specific protocol, and all groups had the recovery procedures and they received information on the safety, rules, and risk factors. The participants divided into four groups equally in each group five participants, the first group was control group (CG), second group performed static stretching (SS), third group dynamic stretching (DS), and last group combination stretching exercises (CSD). The test was conducted by the Brower Wireless Timer System; it was the major collecting data by recording the time score of the sprint performance in 20 meters.

### **Results**

Group 1. Control group slight variables change improvement  $p < 0.1$ . Group 2. Static Stretching group protocol there was significant decrease in time score result of the sprint performance  $p > 0.14$ . Group 3. Dynamic Stretching group protocol there was slight improvement of time score in sprint performance  $p < 0.3$ . Group 4. Compensation Static following Dynamic group protocol there was significant improvement of time score in sprint performance by  $p < 0.9$  variables change.

### **Conclusion**

The first recommendation for semi-professional college football players applying CSD protocol pre training and game for better sprint time performance in the short term phase. The second recommendation using DS protocol due the slight positive variables result in improving sprint time performance. Lastly, do not use SS protocol due to reducing the sprint time performance in the short term phase.

**Keywords:** Static Stretching, Dynamic Stretching, Compensation Stretching, Bulgarian Split Squat Exercise, Sprint Performance, Physiological Factors, Brower Wireless Timer System.