

## A Comparison of Pre and Post-Season Proprioception, Functional Endurance, and Coordination Changes of Professional Soccer Players

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**Objectives:** Soccer is amongst the most popular sports in the world, and also it is one of the sports in which physical injury occurs most. The aim of the present study was to investigate soccer players' pre- and post-season physical injury-related parameters, to analyze the effectiveness of the training program, and to evaluate changes in their physical performance throughout the season.

**Methods:** In the present study, 16 soccer players (mean age: 18.87±0.61 years) and 16 sedentary individuals (mean age: 20.93±4.48 years) were recruited. In both groups, proprioception, functional endurance, and coordination were assessed. Soccer players were assessed twice: pre- and post-season, while the sedentary group was assessed only once.

**Results:** Pre-season concentric and eccentric coordination levels of the soccer players were found to be higher than those of the sedentary group ( $p<0.05$ ). In addition, post-season concentric coordination levels of the soccer players were higher than those of the sedentary group ( $p<0.05$ ). In terms of proprioception levels, no statistical difference was observed between pre- and post-season in the soccer group and between groups ( $p>0.05$ ). When the pre-season values were compared with the post-season values in the soccer group, while there was a significant decrease in concentric coordination values ( $p<0.05$ ). There was a significant increase in concentric endurance values ( $p<0.05$ ).

**Conclusion:** Pre- and post-season detailed evaluations of the soccer players would be beneficial in terms of not only identifying their physical needs and the shortcomings in their physical fitness but also they would be beneficial in designing the training programs.

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