

FITNESS PROFILING IN SOCCER: PHYSICAL AND PHYSIOLOGICAL CHARACTERISTICS OF ELITE PLAYERS

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The purpose of this study was to evaluate whether players in different positional roles have a different physical and physiologic profile. For the purpose of this study, physiologic measurements were taken of 270 soccer players during the precompetitive period of 2005/06 and the precompetitive period of 2006/07. According to the positional roles, players were categorized as defenders ($n = 80$), midfielders ($n = 80$), attackers ($n = 80$), and goalkeepers ($n = 30$).

Analysis of variance (ANOVA) was used to determine differences between team positions. Goalkeepers are the tallest and the heaviest players in the team. They are also the slowest players in the team when sprinting ability over 10 and 20 meters is required. Attackers were the quickest players in the team when looking at sprint values over 5, 10, and 20 meters. There were statistically significant differences between attacker and defenders when measuring vertical jump height by squat jump. Goalkeepers were able to perform better on explosive power tests (squat jump and countermovement jump) than players in the field. Midfielders had statistically significant superior values of relative oxygen consumption, maximal heart rate, maximal running speed, and blood lactate than defenders and attackers. Defenders had more body fat than attackers and midfielders ($p < 0.05$).

Coaches are able to use this information to determine which type of profile is needed for a specific position. It is obvious that players in different positions have different physical and physiologic profiles. Experienced coaches can use this information in the process of designing a training program to maximize the fitness development of soccer players with one purpose only, to achieve success in soccer.