

# The Development of Aerobic and Skill Assessment in Soccer

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## Abstract

Methods of assessing soccer players' performance have developed significantly in recent times. The fitness profiles and skill levels of a prospective elite soccer player is a valuable resource for coaches in the process of identifying talent. Traditional means to measure aerobic fitness have centred on the 'aerobic capacity' or ' $\dot{V}O_{2max}$ ' test (also known as the maximal oxygen consumption test) but, over time, this has been shown not to be a sensitive measure for specific aspects of soccer in a match situation. Therefore, numerous soccer-specific simulations have been designed to re-create exercise patterns similar to those experienced during a match. Some of these studies have yet to be validated, while others have been shown to result in a similar physiological load to that encountered during regular match play. Further developments have led to specifically designed intermittent sprint tests, which are used as a sensitive tool to accurately measure the fluctuations in players' ability both between and within soccer seasons. Testing procedures have also been developed that incorporate elements of both skill and physical ability. Soccer-specific field tests have been designed, incorporating skill and dynamic movements, and this opens up the possibility of teams testing the aerobic capacity of their elite players using soccer-specific movements. Valid studies assessing soccer-specific skills in an ecologically sound environment have been quite rare until recently. Some test protocols have been deemed largely irrelevant to soccer match play, while others have had limited impact on scientific literature. More recently, skill tests have been developed and shown to be valid and reliable methods of assessing soccer skill performance.