

Effects of Nutrition Education on Dietary Intake Quality and Nutrition Knowledge in Professional Soccer Players – A Pilot Study

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ABSTRACT

Background and Aims: Nutrition is an important factor for optimal performance of professional athletes. Several studies have demonstrated that elite athletes, especially soccer players, don't eat enough or a high quality diet. Research shows that a diet with 65-70% of calories from carbohydrates, 20-35% calories from fat and approximately 12% of calories from protein out of an approximate 5,000 kcal diet will show improvements in performance of athletes training at high intensities. This pilot study aimed to test the impact of a targeted nutrition education program on dietary intake quality and nutrition knowledge in professional soccer players.

Methods: We initially evaluated 35 professional soccer players in San Antonio at the beginning and/or end of pre-season training. However, the number of intervention players (n=3) that 1) accurately completed the evaluation diet log and knowledge survey and 2) remained with the team throughout the pre-season were very limited (n=3). The intervention players were on the team roster at the beginning of the pre-season. The non-intervention players (n=3) were added to the team well after the intervention itself and matched the experience level of the intervention players. Pre-intervention evaluation consisted of a dietary analysis and nutrition knowledge survey given the first week of pre-season (intervention players only). Educational intervention was given during the second week of pre-season and was designed to address major dietary deficiencies identified in pre-intervention dietary analysis and performance nutrition knowledge survey. At week 9 of pre-season, dietary analysis and nutrition knowledge surveys were administered to both the intervention and non-intervention groups.

Results: We found no significant differences between the intervention group and the non-intervention group.

Discussion: The power of this evaluation was highly limited due to unforeseen logistical issues associated with professional soccer teams. These included 1) poor player compliance with diet logs and survey, 2) very limited access to players during pre-season, 3) budgetary restrictions on training related hydration and recovery nutrition supplements, 4) high player turnover within the 9-week period, and 5) very low subject number. Anecdotally, several players and coaches expressed increased knowledge of appropriate performance nutrition and found themselves practicing what they learned during the education sessions and have invited the investigators back this season to provide nutrition education.

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