



Nutritional practice of soccer players in premier league of Ethiopia

Meseret Tesfaye¹, Paramvir Singh²

¹ Lecturer, Department of Sport Science, Adama Science and Technology University, Ethiopia, Punjab, India

¹ Scholar, Department of Sport Sciences, Faculty of Medicine, Punjabi Uni. Patiala, Punjab, India

² Professor, Department of Sport Sciences, Faculty of Medicine, Punjabi Uni. Patiala.

Abstract

This study aimed to investigate the dietary habits of players in the premier league of Ethiopia. A cross-sectional study design was employed. A total of 68 players (40 male and 28 female) were engaged as a participant from four football clubs in the Ethiopian football premier league. Sixty-eight players filled out the questionnaire correctly and returned it on time. Descriptive statistics were tabulated for players' demographic data, and their total and sub-category mean scores. From the total dietary habits score results obtained, no significant ($p > 0.05$) difference was found between the age, educational qualification, and source of nutritional information regarding dietary habits. But there was a significant ($p < 0.05$) difference between gender participant players, such as both male and female players, regarding dietary habits. Only gender is a correlated relationship in dietary habits, while age, educational qualification, and source of information have no correlated relationship in dietary habits.

Keywords: nutritional practice, premier league and players

Introduction

Soccer is a strength and power-contact sport involving high-intensity activity, training and competition. Matches involve intermittent high-intensity sprints between periods of jogging and walking and repeated physical contact (Tumilty, 1993). Hence, elite soccer athletes require sufficient energy to achieve and maintain energy balance, which is essential for preserving lean tissue and immune function and promoting optimal athletic performance.

Moreover, Barr, Butterfield and Manore, (2000) reported, "Physical activity, athletic performance, and recovery from exercise are enhanced by optimal nutrition and dietary habit". They stressed athletes who desire to optimize performance need to "follow good nutrition and hydration practices, use supplements and ergogenic aids carefully, minimize severe weight loss practices, and eat a variety of foods in adequate amounts" (Barr et al., 2000). Optimum nutrient intake and dietary habits have been recognized as the key factors that play a critical role in improving the soccer player's performance in terms of improved quality of training and a speedy recovery from exercise in athletic (Cotunga, Vickery & McBee, 2005; Jessri, Rashidkhani & Zinn, 2010).

Adequate nutrition knowledge and dietary habits are essential for optimizing health, physical fitness, and fatigue, allowing athletes to perform and compete longer or quicker between training sessions and achieve peak athletic performance (ACSM/ADA/DC, 2000; Lin & Lee, 2005) [4]. Even though players are training and playing regularly, diet is now a crucial part of the game to produce maximum effort and allow players to maintain their body weight and composition. Therefore, the purpose of this research is to investigate the dietary habits of Ethiopia's premier league football players.

Materials and Methods

A cross-sectional study design was employed to investigate the dietary habits of players in the premier league of Ethiopia. The sample comprised 2018/19 Ethiopian football premier league football players. They were 16 football clubs participating in the Ethiopian premier league. The researcher purposefully selected four football clubs in 2018/2019 that were ranked from one to four. To ensure fair representation of the population, the researcher utilized a stratified random sampling technique of 4 football clubs for strata. Because to minimize sampling bias and create relatively the homogeneity of the population due to time, cost and resource availability at the researcher's disposal. Of a total of 80 players participants within four football clubs in the Ethiopian football premier league, the number of 40 male and 40 female players participants totally who took part in this study was 80. Of these, three were discarded because of incomplete answers, five didn't return the questionnaires, two were unidentified by age, and two were unidentified by gender. Therefore, only 68 questionnaires were analyzed. 58.82% of the males and 41.18% females, in terms of qualification, 42.6% were high school graduates, 11.8% were below high school, 35.3% were college certificates and diplomas, and 10.3% had a degree. In terms of age, 30.9% were from 18-23, 38.2% from 24-29, 22.1% from 30-34, and 8.8% 35+ above. A questionnaire was utilized for this study for its simplicity for such a large sample, the nature of the study, and the ease with which data might be obtained. The questionnaire had several parts that met each

objective. The questionnaire structure was based upon previous work by Parameter and Wardle (1999) examining nutritional knowledge. This questionnaire consists of a total of 42 items. Descriptive statistics were tabulated for players' demographic data, and their total and sub-category mean scores. Data were analyzed using SPSS version 20 for Windows.

Result

Nutritional Practice

Table 1: Regularity of meals before training

		Gender participants		Total
		Male	Female	
Meals before training	Always	33	3	36
	Sometimes	6	21	27
	Never	1	4	5
Total		40	28	68

Table 2: Regularity of skipping any meal before the competition

		Gender Participants		Total
		Male	Female	
Skip any Meals before the competition	Always	3	4	7
	Sometimes	13	20	33
	Never	24	4	28
Total		40	28	68

From the result, 41.18% of players never skip any meal before the competition, either lunch, male or female skip meal during the competition. 48.53% had meals sometimes, whilst 10.29% of players always skipped any meal before the competition. A significant ($p < 0.05$) difference was found between the male and female players who skipped any meal before the competition.

Table 3: For home matches, meals can be eaten 3-4hrs before the game

		Gender Participant		Total
		Male	Female	
Home matches, meals ate 3-4hrs before the game	Always	35	15	50
	Some times	5	11	16
	Never	0	2	2
Total		40	28	68

From the result, 2.94% of all players never consumed 3-4 hours before home matches. 23.53% of players sometimes had, whilst 73.53% of players finished 3-4 hours before home matches. A significant ($p < 0.05$) difference was found between male and female players who consumed 3-4 hours before home matches.

Table 4: Away matches, meals can be eaten 3-4hrs before the game

		Gender Participants		Total
		Male	Female	
Away matches eaten 3-4hrs before the game	Always	36	3	39
	Some times	4	16	20
	Never	0	9	9
Total		40	28	68

From the result, 13.24% of all players never consumed 3-4 hours before away matches. 29.41% of players sometimes had, whilst 57.35% of players always consumed 3-4 hours before away games. A significant ($p < 0.05$) difference was found between male and female players who consumed 3-4 hours before away games.

Table 5: Players who undertake additional training

		Gender Participant		Total
		Male	Female	
Train outside of football training	Always	34	2	36
	Sometimes	6	24	30
	Never	0	2	2
Total		40	28	68

From the result, 2.94% of players never had additional training outside of football training, 44.12% had sometimes, while 52.94% of players always undertook additional training outside of football training. A significant ($p < 0.05$) difference was discovered between male and female players exercising outside of football training.

Table 6: Players who consume the same foods postseason

		Gender Participants		Total
		Male	Female	
In the offseason, do you eat	More	5	0	5
	Less	33	5	38
	Same amount	2	23	25
Total		40	28	68

7.35% reported eating more, 58.88% ate less, whilst 36.76% reported eating the same amount as during the season. A significant ($p < 0.05$) difference was observed between male and female players in terms of the amount of food the players eat in the off-season.

Table 7: Taken any supplements in the past year

	Male	Female	Total %	Male	Female	Total %	Male	Female	Total %
	Always			Sometimes			Never		
A. Multimineral	21	0	30.88%	14	27	60.29%	5	1	8.82%
B. Multivitamins	3	6	57.35%	3	20	33.82%	1	5	8.82%
C. Creatine	0	0	0%	1	12	19.12%	2	29	80.88%

Significant ($p < 0.05$) difference was discovered in the number of male players using multi-mineral, multivitamins, and creatine supplements when compared to female players. No important ($p > 0.05$) difference was found between male and female players, with a single player currently using creatine supplementation.

Table 8: Players who eat at halftime

		Gender Participants.		Total
		Male	Female	
Players who eat at halftime	Yes	6	5	11
	No	34	23	57
Total		40	28	68

16.18% of all players consumed food at halftime, and 83.82% of players finished food at halftime. However, no significant ($p > 0.05$) difference was observed between male and female players in terms of players who consumed food at halftime.

Table 9: Do you currently using creatine

		Gender Participants		Total
		Male	Female	
Do you currently use creatine?	Yes	9	3	12
	No	31	25	56
Total		40	28	68

17.65% of all players had used creatine, and 82.35% had not used creatine. However, no significant ($p > 0.05$) difference was reported when examining creatine usage between male and female players.

Table 10: Water or sports drinks consumed

	M	F	Total %	M	F	Total %	M	F	Total %
	Always			Sometimes			Never		
A. Training	35	3	55.88%	4	21	36.76%	1	4	7.35%
B. Pre-match	37	2	57.35%	3	26	42.65%	0	0	0%
C. Half time	36	3	57.35%	4	22	38.24%	0	3	4.41%
D. Post-match	36	4	58.82%	4	23	39.71%	0	1	1.47%

Q10 a, b, c, d: do you drink sports drinks at any following times. Significant ($p < 0.05$) difference was reported between male and female players consuming sports drinks during training, pre-match, halftime, or post-match.

Conclusion

From the total dietary habits score results obtained, no significant ($p > 0.05$) difference was found between the age, educational qualification, and source of nutritional information regarding dietary habits is rejected. But, there was a significant ($p < 0.05$) difference between sex participant players, such as both male and female players, regarding dietary habits. Only sex is a correlated relationship in dietary habits; while age, educational qualification, and source of information have no correlated relationship in dietary habits.

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Conflict of interest

The authors declare that they have no conflict of interest.

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