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Determinants of athletes' food choice motives in Ethiopian premier league football clubs

Getachew Tesema and Vijay Mohan

Abstract

Dietary choice or food selection is recognized to be affected through numerous aspects, among that taste, convenience, price, fitness and performance, weight control and cultural /or religious dogmas are some of them. Hence the emphasis of this study was planned to study the food choice motives of players in Ethiopian premier league football clubs. A Cross-sectional research design (survey), involved 100 players from four (4) football clubs were purposively selected (25 players from each club). Food choice decision were assessed using validated questionnaire. ANOVA was used for the group comparisons and Post-hoc test was used when statistically significant mean differences was observed. Players' nationality and food choice decision was analyzed using independent sample t-test. The result indicates that as whole for all the players the key factors affecting food choice decision was, Fitness & performances (M=3.20, SD=0.668), followed by health (M=2.99, SD=0.692), weight control (M=2.950, SD=0.728), price (M=2.88, SD=1.263), and sensory appeal (M=2.860, SD=0.692). There were no statistical significant mean differences between the football clubs for six (6) of the factors as $p > 0.05$ -(Convenience, mood, natural contents, political values, environmental protection, and familiarity), but Statistically significant mean differences between the football clubs for seven (7) of the factors, like price, health, fitness and performance, weight control, animal welfare, sensory appeal and religion across the football clubs. There was significant interaction effect found only between the football club and nationality of player on the importance of both political values as food choice factors ($p = 0.047$) and familiarity as foods choice factors ($p=0.018$). Player's food choice decision was significantly different for the factors, price, health, fitness and performance, weight control, animal welfare, sensory appeal and religion across the football clubs. On the other hand they don't shows that much significant differences for the factors Convenience, mood, natural contents, political values, environmental protection, and familiarity among the football clubs. This shows that in all the clubs under this study there were different factors which can affect players food choice decision. Nationality of players also shows variances in the food choice decision under the factor health and natural contents- were players having foreign nationality are more affected. In the case of price, environmental protection and religion players having Ethiopian nationality were more affected.

Keywords: Food choice factors, Athletes, fitness/performance weight control

Introduction

Key factors of food choice motives

Table 1: key factors in food choice motives/decision for the football players

Factors	Mean	Std. Deviation
convenience	1.3820	0.80759
health	2.9917	0.69202
mood	1.6900	0.88048
Fitness & performances	3.2025	0.66827
Weigh control	2.9500	0.72841
price	2.8800	1.26355
Animal welfare	0.8600	1.09885
Natural contents	1.8817	0.78934
Sensory appeal	2.8600	0.69205
Political value	1.3725	1.05139
Environmental protection	2.3300	0.79287
familiarity	1.8333	0.81993
Religion	1.7450	1.43283

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To address the objective of the study- to explore the key factors of food choice motives of football players in Ethiopian premier league clubs and to examine the relative importance of these factors, mean and standard deviation analyses were conducted using SPSS on the thirteen (13) food choice motive

factors. Fitness & performances factor was found to have the highest mean (M=3.20, SD=0.668), followed by health factor (M=2.99, SD=0.692), weight control factor (M=2.950, SD=0.728), price factor (M=2.88, SD=1.263), and finally sensory appeal (M=2.860, SD=0.692).

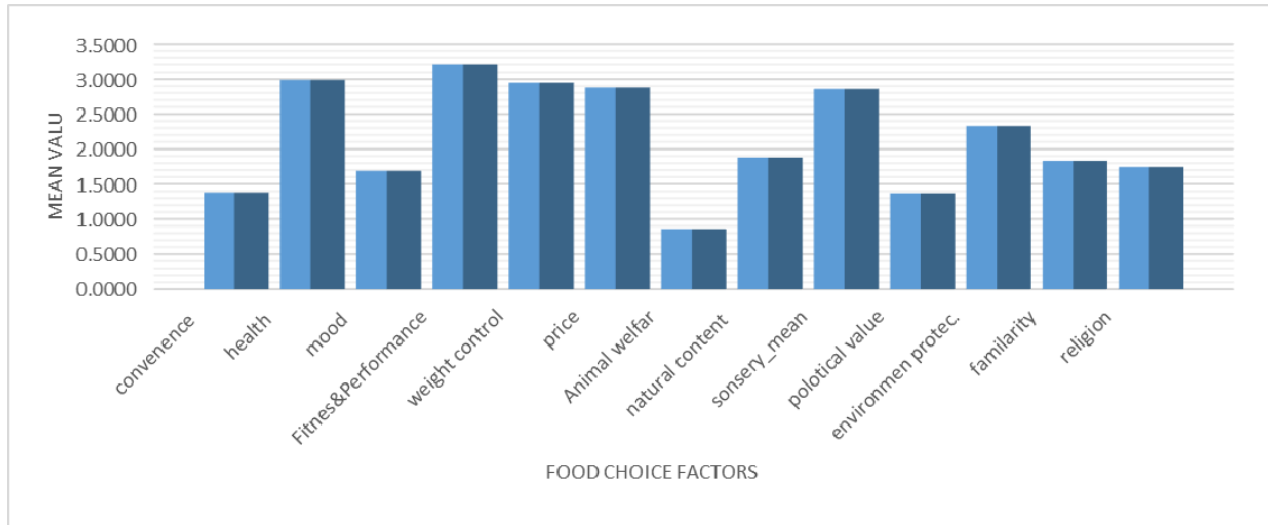


Fig 1: players key food choice motive factors

The mean values in table one (1) and figure one also indicates that, the list five (5) food choice factors for the players were animal welfare (M=0.86, SD=1.098), political values (M=1.37, SD=1.051), convenience (M=1.38, SD=0.807), mood (M=1.69, SD=0.88), and religion (M=1.745, SD=1.43).

Food choice motives across the football clubs

In this section a one-way ANOVA between groups was conducted independently to compare the food choice motives or factors affecting food choice decision of players with the independent football clubs based on their education level and nationality with $p < 0.05$. Player’s nationality (Ethiopian and foreigner) was analyzed using independent sample t-test. Results revealed that there were no significant differences between the football clubs for six (6) of the factors as $p > 0.05$ - (Convenience, mood, natural contents, political values, environmental protection, and familiarity) and the remaining seven (7) factors, (price, health, fitness and performance, weight control, animal welfare, sensory appeal and religion), were found to be statistically significant across the football clubs. Furthermore, statistically significant mean difference for education level of players were observed under the factor convenience ($p=0.025$), weight control ($p=0.033$), animal

welfare ($p=0.002$), and religion ($p=0.014$). Independent sample t-test for nationality of players shows statistical significant mean difference under the factor health ($t=0.001$), price ($t=0.001$), natural content ($t=0.013$), environmental protection ($t=0.041$), and religion ($t=0.001$).

Post-hoc compression for food choice factors having significant mean differences

In this section, the detail of factors affecting food choice decision by players having statistically significant mean difference across the groups was analyzed.

Price

A one-way between subjects ANOVA was conducted to compare the price of food as food choice factor in the four football club conditions. There was statistically significant mean difference at $p < .05$ level for the four conditions [$F(3, 96) = 3.085, p = 0.031$].

Post-hoc analyses using Tukey’s HSD post-hoc criterion for significance indicated that the mean score for price was significantly higher for Hadiya Hosanna FC players (M = 3.340, SD=0.825) as compared to St Gorge FC players (M = 2.300, SD=1.354).

Table 2: ANOVA result for price (a) and its multiple comparisons (b) for the football clubs

(A)

Price					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	13.900	3	4.633	3.085	.031
Within Groups	144.160	96	1.502		
Total	158.060	99			

(B)

Tukey HSD						
(I) names of club	(J) names of club	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
St .Gorge	ET. Coffee	-.62000	.34660	.285	-1.5262	.2862
	ELPHA	-.66000	.34660	.233	-1.5662	.2462
	Hadiya Hosanna	-1.04000*	.34660	.018	-1.9462	-.1338
ET. Coffee	St .Gorge	.62000	.34660	.285	-.2862	1.5262

	ELPHA	-.04000	.34660	.999	-.9462	.8662
	Hadiya Hosanna	-.42000	.34660	.621	-1.3262	.4862
ELPHA	St.Gorge	.66000	.34660	.233	-.2462	1.5662
	ET.Coffee	.04000	.34660	.999	-.8662	.9462
	Hadiya Hosanna	-.38000	.34660	.693	-1.2862	.5262
Hadiya Hosanna	St.Gorge	1.04000*	.34660	.018	.1338	1.9462
	ET.Coffee	.42000	.34660	.621	-.4862	1.3262
	ELPHA	.38000	.34660	.693	-.5262	1.2862

*. The mean difference is significant at the 0.05 level. a. ANOVA b. post hoc test

However, the mean score for Ethio Coffee FC (M = 2.920, SD=1.343) and ELPHA FC (M = 2.960, SD=1.298) did not show any significantly statistical difference. Specifically, the results suggest that for Hadiya hosanna FC player's price was considered as one of the key factor in making their food choice. However, it shouldn't be that much ample for St George FC players to use price as the main factor in food choices decision among all the clubs. According to (K. L. Birkenhead & Slater, 2015) certainly, those at the elite or professional level, who train full time, report that financial issues are the major issues in food choice decision. Additionally, (Heaney, O'Connor, Naughton, & Gifford, 2008) stated as elite athletes on a limited budget report financial constraints interfere with the right food choices that support a healthy diet. Furthermore, (Brooks, Simpson, & Raubenheimer, 2010), report as increasing overall energy content of food only modestly raises the cost of foods, largely as a result of macronutrients having very different costs. Higher food prices are associated with higher protein content and lower carbohydrate content, whereas fat content was not significantly associated with food price. Moreover, there was statistically significant difference for the factor price between foreigner player M=3.260, SD=0.967) and Ethiopian players (M=0.625, SD=1.060) for the conditions; t (98) =6.170, p = 0.001.

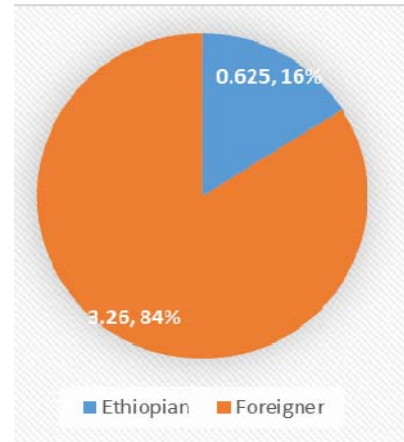


Fig 2: Food price factor and nationality of football player in Ethiopian premier league

In the other case the price of foods has shown no any statistically significant mean difference for education level of player (F (4, 95) = 1,584 p = 0.185)).

Health

A one-way ANOVA result for the factor "health" in food choice decision indicates, there were statistically significant differences between group means for the different football club categories as (F (3, 96) = 11.016, p = 0.001)).

Table 3: ANOVA result (a) and multiple comparison (b) for health factor in the football clubs

a. ANOVA for Health factor					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.141	3	4.047	11.016	.001
Within Groups	35.269	96	.367		
Total	47.410	99			

b. Multiple comparisons						
(I) names of club	(J) names of club	Mean Difference (I-J)	Std. Error	Sig.	Tukey HSD	
					95% Confidence Interval	
					Lower Bound	Upper Bound
St .Gorge	ET.Coffee	.16667	.17144	.766	-.2816	.6149
	ELPHA	.28000	.17144	.365	-.1682	.7282
	Hadiya Hosana	.92000*	.17144	.000	.4718	1.3682
ET.Coffee	St .Gorge	-.16667	.17144	.766	-.6149	.2816
	ELPHA	.11333	.17144	.911	-.3349	.5616
	Hadiya Hosana	.75333*	.17144	.000	.3051	1.2016
ELPHA	St .Gorge	-.28000	.17144	.365	-.7282	.1682
	ET.Coffee	-.11333	.17144	.911	-.5616	.3349
	Hadiya Hosana	.64000*	.17144	.002	.1918	1.0882
Hadiya Hosana	St .Gorge	-.92000*	.17144	.000	-1.3682	-.4718
	ET.Coffee	-.75333*	.17144	.000	-1.2016	-.3051
	ELPHA	-.64000*	.17144	.002	-1.0882	-.1918

*. The mean difference is significant at the 0.05 level.

Post hoc comparisons using the Tukey HSD test indicated that the mean score under the health factor of food choice motives for Hadiya Hosanna FC players (M = 2.41, SD=0.737) shows

significant statistical difference for St Gorge FC players (M=3.33, SD=0.396), Ethio. Coffee FC players (M = 3.1667, SD=0.650), and EPLHA FC players (M = 3.0533,

energy demands of exercise and this can vary considerably depending on the type of sport. Results of study conducted by (Pelly, King, & O'Connor, 2006) exploring factors important to athletes when making food decisions suggest performance is the most important. In the same with this finding, study conducted by (Robins & Hetherington, 2005) found performance was a main aspect influencing the food choices before training or competitions. Nutritious and selecting the appropriate food and drink is a critical part of any exercise program and is a healthy way to improve fitness and performance of athletes. Hence

considering fitness and performance while deciding what to eat and when the major factor which affect food choice of players.

Weight control

A one-way between subjects ANOVA was conducted to compare weight control as food choice factor in the four football club conditions. There was statistically significant mean difference at $p < .05$ level for the four conditions [$F(3, 96) = 5.202, p = 0.002$].

Table 5: ANOVA result (a), and its multiple comparison (b)

a. ANOVA RESULT FOR weight control						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	7.346	3	2.449	5.202	.002	
Within Groups	45.182	96	.471			
Total	52.528	99				

b. Multiple comparison		dependent variable; weight control			Tukey HSD	
(I) names of club	(J) names of club	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
St .Gorge	ET.Coffee	-.74667*	.19404	.001	-1.2540	-.2393
	ELPHA	-.46667	.19404	.083	-.9740	.0407
	Hadiya Hosana	-.29333	.19404	.435	-.8007	.2140
ET.Coffee	St .Gorge	.74667*	.19404	.001	.2393	1.2540
	ELPHA	.28000	.19404	.476	-.2273	.7873
	Hadiya Hosana	.45333	.19404	.097	-.0540	.9607
ELPHA	St .Gorge	.46667	.19404	.083	-.0407	.9740
	ET.Coffee	-.28000	.19404	.476	-.7873	.2273
	Hadiya Hosana	.17333	.19404	.808	-.3340	.6807
Hadiya Hosana	St .Gorge	.29333	.19404	.435	-.2140	.8007
	ET.Coffee	-.45333	.19404	.097	-.9607	.0540
	ELPHA	-.17333	.19404	.808	-.6807	.3340

*. The mean difference is significant at the 0.05 level.
a. ANOVA result for weight control b. multiple comparison

Post hoc comparisons using the Tukey HSD test indicated that the mean score for the weight control factor of food choice motives of Ethio. Coffee FC players ($M = 3.320, SD=0.531$) was significantly different from St Gorge FC players ($M= 2.573, SD=.69068, p=0.001$). However, there was no any statistically significant difference in the mean of weight control variable among the remaining football club players as $P > 0.05$ -which is indicated in table (5b). This shows that the importance given for weight controlling factor in the food choice decision was less in St Gorge FC players, while greater importance was observed in Ethio, Coffee FC players, ELPHA FC players and Hadiya Hosanna FC players respectively. Several athletes attempt to adjust their body weight and composition trusting this will improve their athletic performance (O'Connor, Olds, & Maughan, 2007). Likewise,

body mass and physical appearances has been publicized to impact the performance outcomes in sportsman (Landers, Blanksby, Ackland, & Smith, 2000) so it should not come as a surprise that physique goals may influence the food choices of athletes.

Generally for football player's body composition is of a particular importance as performance in football players are strongly reliant on body morphology and composition, hence consideration of weight control while making food choice is vital for this athletes.

Sensory appeals

A one-way ANOVA result for the factor "sensory appeals" in food choice decision indicates, there were statistically significant differences between group means for the different football club categories as ($F(3, 96) = 10.205, p = 0.001$).

Table 6: ANOVA result of sensory appeals (a), Post Hoc Comparison (b)

a. ANOVA result of Sensory appeal for the clubs					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.465	3	3.822	10.205	.001
Within Groups	35.950	96	.374		
Total	47.415	99			

b. Multiple comparison		dependent variable; sensory appeals			Tukey HSD	
(I) names of club	(J) names of club	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
St .Gorge	ET.Coffee	-.01000	.17308	1.000	-.4625	.4425
	ELPHA	-.20000	.17308	.656	-.6525	.2525

Table 7: Food choice motives and nationalities of player

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Convenience	Equal variances assumed	1.445	.232	.846	98	.400
	Equal variances not assumed			1.309	10.912	.217
health	Equal variances assumed	10.813	.001	-2.399	98	.018
	Equal variances not assumed			-6.660	47.212	.001**
mood	Equal variances assumed	2.585	.111	.133	98	.894
	Equal variances not assumed			.270	16.224	.790
Fitness & Performance	Equal variances assumed	3.406	.068	-1.107	98	.271
	Equal variances not assumed			-2.173	15.198	.046
Weight control	Equal variances assumed	2.262	.136	-1.390	98	.168
	Equal variances not assumed			-2.646	14.385	.019
Price	Equal variances assumed	.001	.982	6.170	98	.001
	Equal variances not assumed			6.261	8.312	.001
Animal welfare	Equal variances assumed	2.679	.105	.629	98	.531
	Equal variances not assumed			1.172	13.889	.261
Natural contents	Equal variances assumed	.166	.684	-2.532	98	.013
	Equal variances not assumed			-2.643	8.406	.028
Sensory apples	Equal variances assumed	4.587	.035	-1.266	98	.208
	Equal variances not assumed			-2.929	22.548	.008
Political value	Equal variances assumed	.150	.700	1.402	98	.164
	Equal variances not assumed			1.552	8.624	.157
Environmental Protection	Equal variances assumed	3.569	.062	2.075	98	.041
	Equal variances not assumed			1.338	7.429	.220
Familiarity	Equal variances assumed	3.732	.056	.149	98	.882
	Equal variances not assumed			.101	7.487	.922
religion	Equal variances assumed	25.936	.000	3.521	98	.001
	Equal variances not assumed			9.145	34.416	.001**

NB.

**= equal variance not assumed

P=0.05

As it can be seen from the independent sample t-test results conducted to compare players' nationality and their food choice motives in Ethiopian premier league football clubs, statistically significant mean difference between player having foreign nationality and Ethiopian nationality were observed for the following food choice factors/motives health $t(47.212) = -6.660, p = 0.001$, price $t(98) = 6.170, p = 0.001$, natural contents $t(98) = -2.532, p = 0.013$, environmental protection $t(98) = -2.075, p = 0.041$, and religion $t(34.416) = 9.145, p = 0.001$. Nevertheless, for the remaining eight (8) of

the food choice motives fit in to the model there were no any statistical significant mean difference. The study conducted by (Asraf Mohd-Any, Shahnaz Mahdzan, & Siang Cher, 2014) reveal that most of the food choice motive factors generally do not vary by ethnic group of peoples. Even though there were some differences in food choice decision based up on their nationality, but it's worthy and interesting that most of players in Ethiopian premier league football clubs, regardless of nationality, exhibit most similar motives in their food choices.

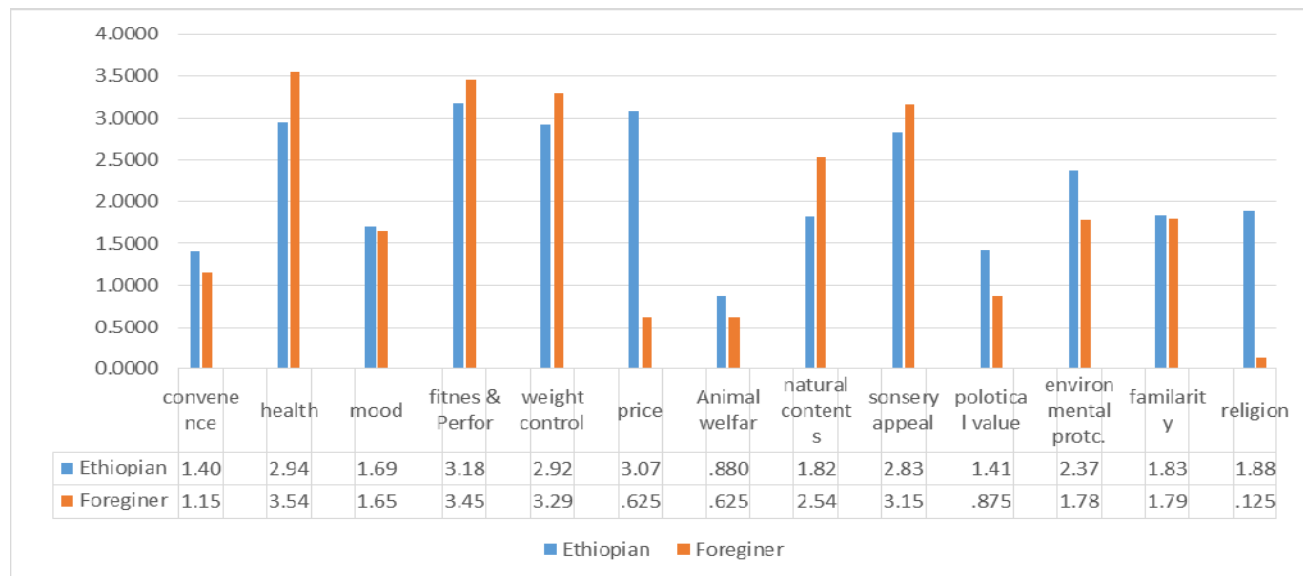


Fig 5: Athletes Nationality and Their Food Choice Motives

The figure also confirms that variance in food choice motives (based up on nationality of players) are observed under the factor health, price, natural contents, environmental protection, and religion. Mostly for the food choice factor health and natural contents players having foreign nationality are being affected. In the case of price, environmental protection and religion players having Ethiopian nationality are more affected. Moreover for most of the food choice motives fit in to the model, there were no that much variance in their food choice decision.

Factorial Analysis with Interaction Effects for the Food Choice Motives and the Independent Variables

A 4 (name of the clubs) x 5 (education level) x 2 (nationality of players) analysis of variance (ANOVA) was calculated

using the independent variables (clubs, education level, and nationality of players) along with the total mean scores from each of the 13 different food choice categories in an attempt to discover differences exists in food choice motives by football clubs, education level and nationality of players.

A significant interaction effect was found only between the following;

- i. The football club and nationality of player on the importance of political values
- ii. The football club and nationality of players on the importance of familiarities of foods. But there were no any significant interaction exist for the remaining eleven (11) food choice motives fit in to the model.

Political Factors

Table 8: Between Subject Effects of Club, Education Level, and Nationality for Political Factor in food choice

Dependent Variable: political factors					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	27.478 ^a	19	1.446	1.412	.145
Intercept	46.221	1	46.221	45.117	.000
club	2.373	3	.791	.772	.513
Edulevel	4.796	4	1.199	1.170	.330
Nation.Athl	.187	1	.187	.182	.670
club * Edulevel	12.121	8	1.515	1.479	.178
club * Nation.Athl	4.182	1	4.182	4.082	.047
Edulevel * Nation.Athl	.550	1	.550	.537	.466
club * Edulevel * Nation.Athl	.000	0	.	.	.
Error	81.959	80	1.024		
Total	297.813	100			
Corrected Total	109.437	99			

a. R Squared = .251 (Adjusted R Squared = .073)

A4 (name of the clubs) x 5 (education level) x 2 (nationality of players) analysis of variance (ANOVA) was calculated to know participants' food choice motives for the factor political value category. There was no significant main effect for participants football clubs, Education level, and nationality, $F(3, 80) = 0.772, p < 0.513$, $F(4, 80) = 1.170, p < 0.330$, and $F(1, 80) = 0.182, p < 0.670$ respectively. In general, the p-values observed for the main effect (football clubs,

educational level of players as well as nationality) indicates no association for the factor political values in food choice decision of football players.

The football clubs x education level Condition interaction was not significant, $F(8, 80) = 1.479, p = 0.178$. In the other case there was a marginally significant for football clubs Condition x Athletes nationality toward political value in food choice decision interaction, $F(1, 80) = 4.082, p = 0.047$.

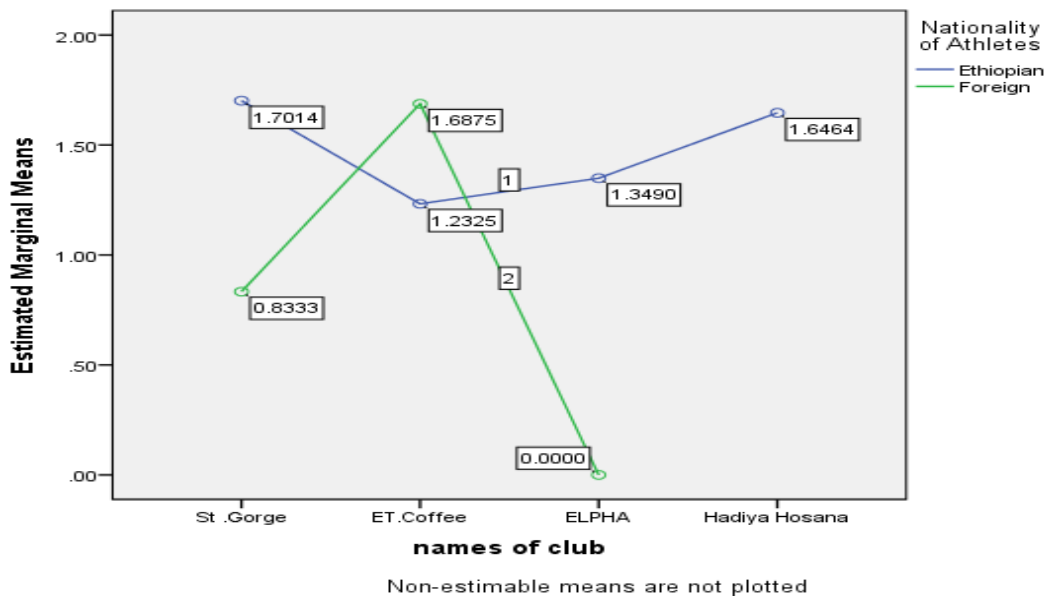


Fig 6: Estimated marginal means of political values in food choices

As can be seen in the figure, in St Gorge FC condition, participants holding Ethiopian nationality assigned more responsibility to the victim using political value as their food choice factor ($M = 2.25, SD = 0.00$) than did participants holding foreign nationality ($M = 0.833, SD = 0.721$). In the case of Ethio. Coffee FC condition, participants holding foreign nationality use political values as a main victim ($M = 1.555, SD = 1.089$) than did participants holding Ethiopian nationality ($1.386, SD = 0.915$). Like that of St Gorge FC players, for ELPHA FC condition, players holding Ethiopian nationality assigned more responsibility in using political value as their food choice factor ($M = 1.260, SD = 0.774$) than did participants holding foreign nationality ($M = 0.00, SD = 0.00$).

Familiarities of Food

A 4 x 5 x 2 analysis of variance (ANOVA) was calculated to know participants' food choice motives for the factor familiarities of food category. There was no significant main effect in both, Education level at $F(4, 80) = 1.818, p < 0.133$, & nationality of players $F(1, 80) = 0.00, p < 0.989$. But, significant main effect is observed for the football clubs at $F(3, 80) = 3.088, p < 0.032$. In general, the p-values observed for the main effect of educational level of players as well as nationality indicates no association for the factor political values in food choice decision of football players. But, the p-value observed in the main effect for football clubs indicates an association for the factor familiarity of foods in food choice decision.

Table 9: Between Subject Effects in Club, Education Levels and Nationality for Familiarity of Food

Dependent Variable: familiarity					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	22.176 ^a	19	1.167	2.104	.012
Intercept	89.143	1	89.143	160.693	.000
Edulevel	4.035	4	1.009	1.818	.133
club	5.139	3	1.713	3.088	.032
Nation.Athl	.000	1	.000	.000	.989
Edulevel * club	6.174	8	.772	1.391	.213
Edulevel * Nation.Athl	.455	1	.455	.819	.368
club * Nation.Athl	3.238	1	3.238	5.836	.018
Edulevel * club * Nation.Athl	.000	0	.	.	.
Error	44.379	80	.555		
Total	402.667	100			
Corrected Total	66.556	99			

a. R Squared = .333 (Adjusted R Squared = .175)

In St Gorge football club, players having foreign nationality gave more responsibility in using familiarity of food as their food choice factor ($M = 2.111, SD = 0.769$) than did participants holding Ethiopian nationality ($M = 1.727, SD =$

0.854). In the case of Ethio. Coffee FC condition, participants holding Ethiopian nationality use food familiarity as their main victim ($M = 1.651, SD = 0.519$) than did participants holding foreign nationality ($M = 0.667, SD = 1.115$).

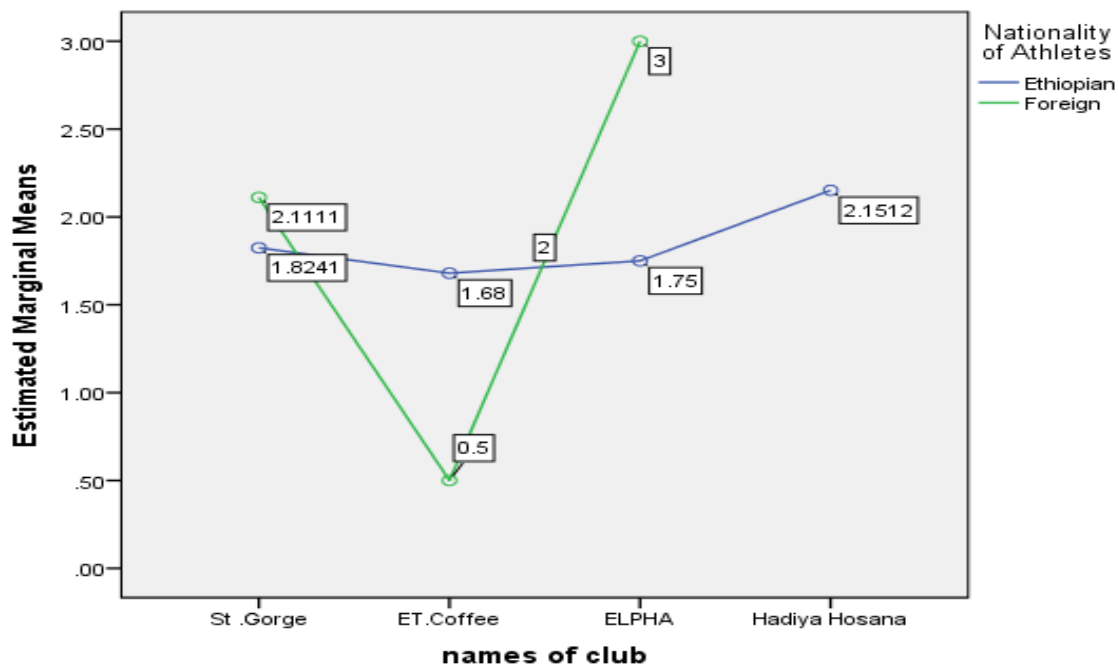


Fig 7: Estimated marginal means of familiarity of foods

Like that of St Gorge FC players, for ELPHA FC condition, players holding foreign nationality assigned more responsibility in using familiarity of food as their food choice factor ($M = 3.000$, $SD = 0.000$) than did participants holding Ethiopian nationality ($M = 1.782$, $SD = 0.421$).

Summery

The finding of the study was summarized as follows;

- As whole for all the players the key or the top five factors affecting food choice decision was, Fitness & performances ($M=3.20$, $SD=0.668$), followed by health ($M=2.99$, $SD=0.692$), weight control ($M=2.950$, $SD=0.728$), price ($M=2.88$, $SD=1.263$), and sensory appeal ($M=2.860$, $SD=0.692$). In contrary, the list five (5) food choice factors were animal welfare ($M=0.86$, $SD=1.098$), political values ($M=1.37$, $SD=1.051$), convenience ($M=1.38$, $SD=0.807$), mood ($M=1.69$, $SD=0.88$), and religion ($M=1.745$, $SD=1.43$).
- The players from Ethio coffee FC has greater mean score for the food choice factors under fitness and performances, weight control and environmental protection and for St Gorge FC players more mean score were observed in sub category of convenience, health and natural contents, to the other end ELPHA FC players has higher score under the factors mood, sensory appeals and environmental protection, finally the factors, price, animal welfare, political values, familiarity and religion were higher for Hadiya Hosanna FC players.
- There were no statistical significant mean differences between the football clubs for six (6) of the factors as $p > 0.05$ -(Convenience, mood, natural contents, political values, environmental protection, and familiarity)
- There was statistically significant mean differences between the football clubs for seven (7) of the factors, like price, health, fitness and performance, weight control, animal welfare, sensory appeal and religion across the football clubs.
- Statistically significant mean difference between players food choice motives and their nationality were observed for the factors health $p = 0.001$, price $p = 0.001$, natural contents, $p = 0.013$, environmental protection $p = 0.041$, and religion $p = 0.001$. Mostly for the food choice factor health and natural contents players having foreign nationality are being affected. In the case of price, environmental protection and religion players having Ethiopian nationality were more affected. But, for the remaining eight (8) of the food choice motives fit in to the model there were no any statistical significant mean difference.
- Statistically significant interaction effect was found only between the football club and nationality of player on the importance of both political values as food choice factors ($p = 0.047$) and familiarity as foods choice factors ($p=0.018$).

Conclusion

In conclusion, the top five factors affecting athletes' food choice decision were Fitness & performances, health, weight control, price and sensory appeal. In contrary, athletes give less attention while making food choice under the factor animal welfare, political values, convenience, mood, and religion. Players from Ethio coffee FC chooses foods mostly based up on their fitness and performances, weight control and environmental protection while; St Gorge FC players focusses on convenience, health and natural contents of foods,

to the other end ELPHA FC players emphasize factors like mood, sensory appeals and environmental protection, finally; price, animal welfare, political values, familiarity and religion were the main concern for Hadiya Hosanna FC players.

Player's food choice decision was significantly different for the factors, price, health, fitness and performance, weight control, animal welfare, sensory appeal and religion across the football clubs. On the other hand they don't shows that much significant differences for the factors Convenience, mood, natural contents, political values, environmental protection, and familiarity among the football clubs. This shows that in all the clubs under this study there were different factors which can affect players food choice decision. That means, there is no single factor that affects the choices of foods for all of the athletes playing in different clubs.

In addition to the football clubs, nationality of players also shows variances in the food choice decision under the factor health and natural contents- were players having foreign nationality are more affected. In the case of price, environmental protection and religion players having Ethiopian nationality were more affected. But, for the remaining eight (8) of the food choice motives fit in to the model there is no any variances in food choice decision and their nationality.

Recommendation

- Athletes may be given adequate and updated sport nutritional education from time to time, so that the training will help them to decide what to eat, when and how much to eat.
- The coaching staff must became a role model for their athletes, and they need to advise a wise strategy how to eat better for their sporting energy demands.
- The football club must have a well-planned and balanced menu guides of sport nutrition by considering pre event, during event, post event and traveling nutrition for their athletes throughout the season.
- In the football clubs sport dieticians professionals must be engaged to work with athletes to create awareness as well as to provide sport nutrition counseling services for better and reliable food choice decision by considering their sporting energy demands.
- This is a basic idea for more research discovering the food choice motives of athletes, possibly in combination with inquiry exploring food consumption to establish if intent translates into practice.

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