

ASSESSMENT OF NUTRITIONAL PRACTICES OF SELECTED AMATEUR FOOTBALL PLAYERS IN OJO LGA, LAGOS STATE

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ABSTRACT

Nutritional practices of athletes are critical to sports performance Since good result is the goal of all stakeholders in sports, the issue of nutrition calls for serious attention. This study, therefore, assessed the nutritional practices of some selected amateur football players in Ojo Government Area of Lagos State. 59 male and female players were purposively selected to participate in the study. A self-developed questionnaire (r = 0.71) was administered on them and the data collected were analyzed using percentage and weighted mean score (WMS). Findings reveal daily inadequate consumption of required nutrients and very poor timing of meals by the players.

INTRODUCTION

The nutritional intake of athletes is a critical. determinant of the performance and ability to compete both physically and mentally (Economas, Bortz & Nelson, 2006; Anderson & Young, 2005;2003; Fahey, Insel & Roth, 2001; Brooks, Fahey, White & Baldwin, 2000; Burke, 1995 and Lewis, 1984). For the fact that diet affects metabolism during rest and physical activity, and because dietary manipulation has been used to enhance performance in several types of athletics endeavors, many individuals who are involved in sports performance now address dietary requirements of athletes, especially those who are to perform at high metabolic rates for extended periods during training and competition. Brooks et al (2001) stated that perhaps no greater mythology exists sports than that built around the subject of nutrition. Books et al (2001)

stress that to gain an immediate competitive edge, athletes have engaged in all sorts of odd dietary practices, and if the athlete is successful, he or she will continue those practices, even if the success (unknowingly to him or her) is really due to some other factors such as genetic endowment and wining.

Studies have revealed that the extreme dietary manipulations performed by some athletes immediately before competition are more likely to affect performance negatively than positively. (Anderson &Young, 2005; Frankl, 2003; Brook et al, 2001; and Lewis, 1984). For stance, Anderson and Young (2005) warn that eating sugar or honey just before an event, which is commonly practiced by some athletes, does not provide any extra energy until 30 minutes after consumption, and the practice may hinder performance. Anderson and Young (2005) and Frankl 2003) also insist that there is no evidence that mega-doses of vitamins and or minerals beyond that is obtained by eating a variety of foods improve performance. Although, less than optimal levels of these micronutrients do under performance, increases caloric intake through a varied diet ensures sufficient amount of vitamins and minerals for the athlete.

The literature has shown that what really allows an athlete to perform up to his or her potential in training and competition may not be he extreme dietary manipulations practices by some athletes, but sound nutritional practices of what to eat, how much to eat and when to eat Anderson & Young 2005; Burke, 1995 & Lewis, 1984). No food stuff has been identified to allow a mediocre, moderately conditioned athlete to become an Olympic champion. But for the fact that nutrient has significant role to play in performance, the approach advocate byBrooks et al (2000) is that adequate diet that is appropriate for the general population is as well appropriate athletes.

A balance (or adequate) diet involves at least three meal per day, in which the daily protein content is 10-15% of the total energy, carbohydrate content is 55-65% and fat consumption is 30% or less (Fahey et al, 2001; & Brooks et al, 2000). The key dietary concerns for athlete are meetingtheir increased energy performance and throughout the day to remain fully hydrated. Adequate nutrition is based on combining specified numbers of servings of foods chosen from each of the four good food groups to receive all the required nutrients. These four food groups according to Howley and Franks (1992) and Getchell, Pippen and Varnes (1987) are:

- Bread and cereal group;
- Vegetable and fruit group;
- Milk and milk products group; and
- Meat, fish, poultry and beans group.

Apart from good selection and combination of foods in athletes' diet, proper timing of athletes' diets before, during and after performance is another nutritional consideration that must be highly valued (Frankl,2003; Fahey et al, 2001).

There are reports that many athletes do not achieve sound nutritional practices to optimize their sports performance (Economos et al, 2006; & Burke, 1995). Factors identified to be responsible for this include poor nutritional knowledge, dietary extremism, poor practical skills in choosing or preparing meals, and reduced access to food due to a busy life style and frequent travel. Economos et al (2006) also state that there are limited sound scientific data about the nutritional practices of athletes. It is not clear, therefore, as to whether athletes are following nutritional recommendations and maintaining nutritionally sound diet practices. This study was therefore, designed to assess the nutritional practices of selected amateur footballers in Ojo Local Government Area of LagosState.Answers were sought for the following research questions in this study.

- 1. Do athletes' meals certain required nutrients?
- 2. Do athletes regularly observe the minimum three meals per day?
- 3. Do athletes observe proper timing of their meals?
- 4. What fluid do the athletes ingest during performance?

METHODS

Participants

Fifty-nine (59) amateur football players were selected from three clubs in Ojo Local Government Area of Lagos State using purposive sampling technique. 48 (81.4%) of these athletes were males, while 11 (18.6%) of them were female. Their mean age was 18.34 + 5.59 within the range of 14-29 years, and their mean year of experience in amateur football was 6.86 + 7.32 within the range of 1-12 years 13 (22%) of this participants attended higher institutions of learning, 36 (61%) of them attended secondary schools, while 19(17%) could not go beyond primary school.

Instrumentation

The main instrument for data collection in this study was a self-developed questionnaire. The questionnaire was in three sections (i.e sections A, B and C). Section A dealt with demographic data of the athletes, which include age, sex, experience in amateur football and highest level of education attained. Section B sought information on food items consumed and frequency of consumption; while section C has to do with meal adequacy, timing and meal during performance.

The instrument was given to three colleagues for the purpose of validity and their contributions and suggestion were considered in the final draft. This instrument was also subjected to testretest method of reliability test, and its Pearson's Product Moment Correlation Coefficient (PPMC)result was 0.71.

Administration of Instrument

The researcher visited the participants. in their training group toseek their consents and that of their coaches. Thereafter, copies of the questionnaire were given to them to fill. Interference among the participants and with other persons was avoided as much as possible. However, assistances were rendered by the researchers where there is need for clarification. All copies of the questionnaire were retrieved immediately after completion.

Data Analysis

The data collected were coded and analyzed using Percentage,Mean and Weighted Mean Score (WMS). Component bar chart was used to give further description of results.

RESULTS

Food Groups	Everyday	1-3	Occasionally	Rarely	Not at All	WMS
Bread /cereal	56	03		_		*3.95
Vegetable / fruit	07	23	24	05	_	*2.54
Milk / milk products	08	09	12	28	02	1.88
Meat/fish/ poultry/ bean	47	08	04	_		*3.73
Average	29.50	10.75	10.00	8.25 -	0.50	*3.03

Table 1: WMS of data of frequency and types of diet consumed by athletes

Criterion for high value = 2.00

Table 2: Frequer	ncy and percen	tage analyses	on minimum	meal per day
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Item	Yes (%)	No (%)	Not sure	Total
			(%)	
Takes breakfast, lunch and	13 (22)	36 (66)	07 (12)	59 (100)

Result presented in table 2 shows that majority of the players (66%) do not observe minimum of three meals per day. Figure 1 reflects this result.



Fig. 1: Component bar chart on players' consumption of three minimum meals per day

Timing	Immediately	10-30	30-	1-11/2	≥2hrs	Anytime	Total
	(%)	mins	hrs	hrs(%)	(%)	(%)	(%)
Meal before	01 (1.7)	03	13	07	02	33	59
performance		(5.1)	(22)	(11.9)	(3.4)	(55.9)	(100)
Meal after	01 (1.7)	11	02	05	01	39	59
performance		(18.6)	(34)	(8.5)	(1.7)	(66.1)	(100)

Result in Table 3 shows that greatest percentage of the players take their meals any time before (55.9%) and after (66.1%) trainings and competitions. Very minutes of the players (3.4%) observe proper timing of their meals before and after training and competition. See also figure 2.

The result presented in table 1 shows that the average WMS (3:03) was greater than 2.00 set for high frequency of consumption. Food items in bread/cereal group has the highest rating (3.95); and those in milk/milk products rated lowest (1.88); and lower than criterion value.



Figure 2: Component bar chart on timing of meal before and after performance

Variable	Water (%)	Fruit Juice (%)	CarbohydrateBeverage s (%)
Fluid ingest	59 (100%)	02 (3.4%)	08 (13.6%)
during training			

Results in table 4 shows that all the players take water during training and competition and just few of them take carbohydrate (13.6%) and fruit (3.4%) beverages. Figure 3 reflects this result.



Figure 3: Component bar chart on fluid ingest during performance

DISCUSSION

Findings of this study reveal that except for foods that belongs to milk and milk products' group, the players' food selection and frequency of consumption is fairly good (see table 1), but the level of consumption is inadequate as most of these players do not take minimum of three meals per day (see also table 2 & figure 1). These practices would definitely have negative effect on the performance levels of the players during training and competition. Studies have posit that athletes must ensure that they have adequate nutrition, which is based on minimum of three meals per day, of food items chosen from each of the four good food groups (Howley & Franks, 1992; Getchell et al, 1987); and the combination of foods should give 55-65% carbohydrate, 10-15% protein and 30% or less fat (Fahey, et al, 2001; Brooks et al, 2000; & Lewis, 1984). Fahey et al (2001) state categorically that one of the key dietary concerns for athletesis to

meet their increased energy requirements, and this can only be ensure through adequate nutrition.

On proper timing of meal during training and competition, this study reveals that greatest percentage of the players take their meals anytime before and after competition (see table 3 & figure 2). This is also a poor nutritional practice that affects performance of athletes negatively. Frankl (2003) opines that diet high in complex carbohydrates must be consumed not later than 4 hours before competition as this positively affect performance in endurance sports. Frankl (2003) also suggest light carbohydrate-rich meal 15 --30 minutes and heavier meal in about one hour after soccer training session or match. Anderson and young (2005) also suggest 3–4 hours for pregame meal.

The finding of this study further reveal that what is the most frequently fluid taken by the players during trainings and competitions. This practice is in order as studies have revealed that there is need for athletes to drink lots of water during performance for adequate hydration (Frankl, 2003; Fahey et al, 2001; Howley & Franks, 1992; Lewis, 1984). Frankl (2003) asserts that a water loss that exceeds two percent (2%) of body weight significantly impairs endurance performance. Frankl (2003) also suggests the consumption of carbohydrate beverages by athletes during performance. The suggestion is based on reports that such beverages outperformance plan water during endurance activity.

In nut shell, this study reveals poor nutritional practices among the players. This finding agrees with previous studies that report poor nutritional practices among athletes (Economos et al, 2006; Anderson & Young, 2005; Brooks et al, 2002; & Burke, 1995). Among the factors that are identified as being responsible for these poor practices are poor nutritional knowledge, dietary extremism, poor practical skills in choosing or preparing meals and reduced access to food.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of this study, it is concluded that the nutritional practices of the selected amateur football players are poor; they do not time their meals and do not consume adequate and competition. The following are therefore recommended:

- 1. The players should be educated on proper nutritional practices and their relationship to sports performance. Such education should address eating strategies and key food and fluid choices that will help to achieve goals of sound nutrition in sports. Club managements could organize seminars, workshops or symposium, where experts in exercise physiology and sports nutrition could be invited toeducate the players; or the players should be made to attend such seminars wherever they are beingorganized.
- 2. Players must be regularly counselled on their nutritional practices during training and when in camp competitions.
- 3. Services of experts should be employed by club managements for periodical nutritional assessment of players for early detection of nutritional deficiencies and poor practices.
- 4. Further study should assess nutritional practices of Nigerian athletes in various sports, and at professional level.

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