NUTRITIONAL KNOWLEDGE AND ATTITUDE OF STUDENT-ATHLETES IN FEDERAL COLLEGE OF EDUCATION, ABEOKUTA, NIGERIA

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Abstract - Knowledge of importance of nutrition is very important to athletes, for adequate knowledge will lead to proper practice of correct intake of balance diet which may enhance their better performance in their different sporting activities.This study examined knowledge and attitude towards nutrition among student-athletes of Federal College of Education (FCE), Abeokuta, Nigeria. The descriptive survey research was adopted and Systematic sampling technique was employed to select fifty (50) student-athletesfor this study. Questionnaire was the instrument for data collection. The study revealed that student-athletes of FCE do not have adequate nutritional knowledge,though their attitude was moderate. It was thereby recommended that sport nutrition education should be part of the athletes'curriculum to help them acquire adequate knowledge and develop right attitude towards nutrition that will help their performances.

Keywords - Nutrition, Student-athletes, Knowledge, Attitude, Nigeria

I. INTRODUCTION

Knowledge of nutrition is important and it isvery essential to athletes because adequate knowledge will lead to proper practice of correct intake of balance diet which may enhance better performance in their different sporting activities and competitions. Nutrition can play a cogent role in making and achieving an optimal health for sport athletes (Ozdaoga and Ozceloz, 2011). Also as important as appropriate nutrition is, it can as well help to reduce fatigue hereby allowing athletes to train and compete for longer period of time as well as recover faster during training sessions (Rudd, 1996 in Ozdiga and Ozcelid, 2011). Understanding the knowledge of nutrition amongstudent-athletes and its direct influence on dietary intake is important for developing the nutrition education to improve athletes' food intake and performance. Inadequate and misconceptions of nutritional knowledge can have great adverse effect on nutritional starts andoverall performance of athletes. (Ali; Al-sijabi; Waly and Kilani, 2015).

Nutrition affects almost every process in the body especially during sporting activities,these includes energy production and recovery after exercise and in other to understand and apply the principles of sport nutrition, there should be basic understanding and knowledge of nutrition and proper diet by athletes (Ozdaoga and Ozceloz, 2011). This knowledge includes thecomposition of every food taken, biochemical and physiology process that occurs in different cells and tissues as well as how these processes are integrated throughout the body. One of the cogent reasons why nutritional advice is not followed may be due to lack of knowledge or information about such nutrition(Ozdaoga and Ozceloz, 2011). It is reportedly acommon practise among athletes to have little or no idea of what normal eating habit or balanced meals are, hence negatively affects their overall performances in sporting activities and competitions (Dunigan, 2010).Athlete with inadequate knowledge of nutrition will also be unaware of additional nutrients needed for them.

Ozdaoga and Ozceloz, (2011) noted in their study that their participants do not possess sufficient knowledge about nutrition which supposed tocreate environment to enhanced positive performance and optimal health.It was also found that the mean knowledge scores of the male students were higher compared to female student-athletes. The importance of nutrition education is increasingly recognized at present and there is consensus that people's food choices, dietary practices and physical activity behaviour influences their overall health output (Ozdaoga and Ozceloz, 2011).

Also, the sources of nutrition information have serious role in building up nutrition knowledge and dietary habits among athletes. Depending on the sources of nutrition information; whether reliable or unreliable, it can have either positive or negative impact on their nutrition intake, exercise, training and their performance (Ali; Al-sijabi; Waly and Kilani, 2015). In a study conducted by Webb and Beckford (2014),male athletes have low knowledge of nutrition as compared to the female athlete and this proportionately affected theattitude they have towards good nutrition. High levels of nutrition knowledge and positive attitude can result in goodhealth and increased performance of an athlete. As such, nutrition is an essential component of any athletic or physical activity program. Knowledge of how the body utilizes nutrients and the relation of nutrients with metabolism in health and disease, energy production and recovery from exercise are all important aspects of sports nutrition (Webb and Beckford, 2014).

Many athletes lack nutrition knowledge they need in order to gain the benefits of increased performance of good health. There are as well misguided and incorrect information obtained from unreliable information sources to the athletes and this has adversely affected their performances in sporting activities(Webb and Beckford, 2014). Aziza et al (2010) also noted that college student-athletes have misconception about nutrition, moderate nutritional knowledge and attitude and further stated that nutritional knowledge was positively correlated with nutritional attitude which indicates that knowledge of nutrition can affect attitude towards it. Athletes must have appropriate nutrition knowledge obtained from easily accessible andreliable resources for nutrition guidance.

Torres-mcGleeet et al(2012) also noted that there is a major concern for professionals lacking sports nutrition knowledge because they may end up disseminating such incorrect nutrition information formulated from unsupported by research to other athletes. They noted that athletes nutritional knowledge are just below average domain because only 9% of their participants scored greater than 75% on nutrition knowledge questionnaire.

Student-athletes in college need to have a minimum acceptable nutrition concept in order to develop healthy eating habits that will help them to maintain body weight and healthy lifestyle while maximising training output (Andrew; Wojak; Boyd and bowery, 2016), they as well discovered in their study that student-athletes did not have adequate knowledge of nutrition based on their mean score of 56.9% which was less than thebenchmark set at 75%. Also, there was no significant difference between the knowledge of nutrition among males and female athletes in their study.

Gilis, Anderson, Morgan and Hamady (2014) concluded in their study that nutrition knowledge was frequently deficient regardless of the types of sport and gender even though females have higher nutritional knowledge than male.

Based on the study by Azizi, Aghaee, Ebrahimi and Ranjbar (2011), it was discovered that students have average nutritional knowledge.Fisher (2013) opined that athletes should strive to maintain a body weight and composition that allows for optional performance by consuming a diet that provides the appropriate number of calories for energy which is needed for sporting activities.

Rash et al (2008), discovered in their study that knowledge about some classes of food like carbohydrates, roles of vitamins and minerals in exercise were fair but athletes lack knowledge of protein,Vitamin C and E. Paugh (2005), in a study discovered that athletes who have better knowledge of nutrition, practice good dietary habits and that female athletes practice good dietary habits than their male counterpart because they have high knowledge of nutrition than male, this means thatnutritional knowledge increases dietary habits and decisions among athletes and lack of knowledge will be equal to poor nutritional practice.Knowledge of nutrition could help to make informed choices which will lead to healthy living and effective participation in sport and good sport performance (Matins, 2015).

It was discovered from review of literature that few studies have been conducted to examine the nutrition knowledge and attitude of nutrition among student-athletes in Higher Institutions in developing countries, hence this study examined knowledge and attitude of student-athletes towards nutrition and diet in Federal College of Education, Abeokuta, Nigeria.

II. METHODOLOGY

The descriptive survey research was adopted for this study and Systematic sampling technique was employed to select fifty (50) student-athletes from Federal college of Education, Abeokuta, Nigeria, whichwere respondents for this study. Questionnaire was the instrument for data collection.

III. RESULTS AND DISCUSSION

3.1. Sources of Information on Nutrition of Student-athletes

This study revealed that the most often used sources in the cause of acquiring nutritional information among athletes in FCE, Abeokuta were Internet (82%), Team Mates (82%) and Coaches (74%). The least used information sources on nutrition among them were Professional Books (12%) followed by Lectures and Seminars (18%) (Fig. 1).

This showed that most of the sources of information were not from authentic, reliable and verified sources and sometimes non-evidence based information sources like internet, friends and family are not reliable source of information especially to student-athletes and thereby the application may be difficult, incorrect and unreliable. For instance, Professional Books and health and sport nutrition Professionals which are both conventional and orthodox information sources accounted for the least used sources by respondents in the study. This study is in line with similar studies like Abdullah and Mal-Allah (2011), who studied thenutritionalinformation sources used by female athletes of the Girls Sports Club in the State of Kuwait. They found that athletes had their nutrition informationmainlyfrom websites, newspapers and magazines.The study of Walsh et al. (2011) also observed poor nutritional knowledgeanddietary practices among young athletes fromIreland.They reported that most of the players hadnutritionalinformation from their coaches followed bymagazines,websites, peers and family, very fewathleteshad nutrition information from healthprofessionals and books.Similarresults have been reported by Sedek and Yih(2014) from Malaysia

that Medical doctors and sport nutritionist in Malaysia havebeen reported to be rarely consulted by athletes in relation to their dietary information need for sporting activities.

3.2. Knowledge of Nutrition among Student-athletes

The study revealed that almost all the respondents (94%)agreed that basic sugars like cube sugar, jam, honey are most suitable energy source for sportsmen. Also 88% agreed that Vitamins supplementation is recommended for all physically active people and are good source of energyand 12% agreed that Iron plays important role in exercise(Table 1).

This revealed that student-athletesin Federal College of Education, Abeokuta did not have up-to-date, correct and adequate knowledge of nutrition in relation to their participation in sport activities. Thestudy revealed that there was poor and misconceived knowledge among student-athletes of Federal college of Education. What is widely believed among student-athletes under this study is in total contrast to theacceptable knowledge of nutrition; this is observed to be as a result of non-conventional and unreliable sources of their information. For instance, in contrast to their general knowledge and believe, it is a known fact thatbasic sugars like cube sugar, jam, honeyetc. are not suitable energy source for sportsmen of which they refuted.This study is corroborated by Aziza etal. (2010) who noted that college athletes have misconception about nutrition and moderate nutritional knowledge and practice. Also Walsh et al. (2011) observed poor nutritional knowledgeanddietary practices among young athletes fromIreland.Webb and Beckford (2014) also discovered that some athletes have little or no knowledge about nutrition.Ozdaoga and Ozceloz, (2011), Azizi, Aghaee, Ebrahimi and Ranjbar, (2011), also from their study agreed that athletes have misconception about some of the nutritional functions of some diets and foods like Chocolate and Biscuit in relation to their sporting activities.

3.3. Student-athletes' Attitude towards Nutrition

This study found out that there was an appreciable and acceptable level of positive attitudes among athletes in Federal college of Education, Abeokuta. For instance, it was found out in the study that all the student-athletes (100%) agreed that type of food an athlete eats directly affects his/her physical and sporting performances, also they all agreed that athletes should schedule his/her activities so he/she has time to eat and that nutritional counselling would be important to the athlete who is trying to change his/her weight (Table 2).

This revealed that even though student-athletes in FCE, Abeokuta did not possess good knowledge of nutrition yet they possessed a slightly acceptable attitude towards their diet in relation to their general sporting activities.This is in consonance withWalsh et al. (2011) in their studyobserved that the athletes showedapositive attitude towards nutrition; however, a betternutritional attitudewas not correlated by their poor dietary knowledge, in other words, even though they lacked general nutritional knowledge yet possessed a relatively good attitude in relation to their sporting activities and competitions.

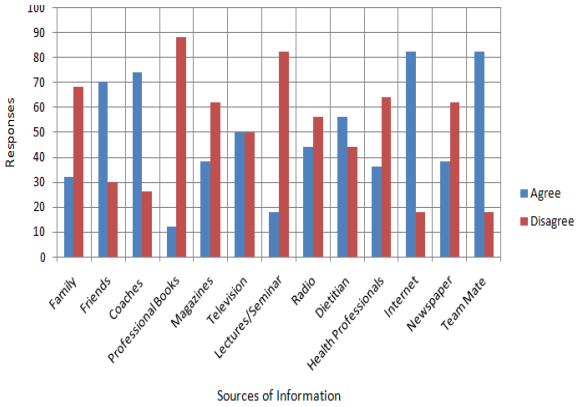


Fig. 1. Sources of Information on Nutrition of Student-athletes

Table 1: Knowledge of Nutrition among Student-athletes

S/N	Knowledge	Agree		Disagree	
		No	%	No	%
1	Eating Carbohydrates makes one fat	12	24	38	76
2	Basic sugars like cube sugar, jam, honey are most suitable energy source for sportsmen	47	94	03	06
3	Glycogen muscles stored carbohydrate can affect energy level available for exercise	07	14	43	86
4	Fats have important role in the body	12	24	38	76
5	Iron plays important role in exercise	06	12	44	88
6	Vitamin supplementation is recommended for all physically active people	44	88	06	12
7	Vitamins are good sources of energy	44	88	06	12
8	Food like Chocolate, Biscuit and drugs are not appropriate for consuming after the training	25	50	25	50
9	The last meal should be consumed 3 – 4 hours before the competition	25	50	25	50
10	Banana are good sources of potassium	22	44	28	56
11	Salt is essential part of a healthy diet	41	82	09	18
12	Milk and milk product are the best sources of calcium	19	38	31	62
13	Dehydration decreases sport performance	31	62	19	38
14	It is important for athletes to consume water throughout the day, during exercise and periods of recovery	09	18	41	82
15	Saturated and unsaturated oils both have equal effect on health	19	38	31	62
16	Alcohol consumption can affect absorption and utilization of nutrient	43	86	07	14
17	Iron deficiency anemia results in a decrease in the amount of oxygen that can be carried in the blood	21	42	29	58

Table 2: Student-athletes' Attitude towards Nutrition

S/N	Attitude	Agree		Disagree	
		No	%	No	%
1	The relationship between good eating habit and good health should be stressed to the athletes	43	94	03	06
2	Coach need to have good attitude towards nutrition because of their close contacted influence upon athletes	43	94	03	06
3	The type of food an athlete eats affects his/her physical performance	50	100	00	00
4	What the athlete eats is only important if the athlete is trying to gain or lose weight	21	42	29	58
5	Nutrition is more important during the season than during the off season for athlete	15	30	35	70
6	Food advertisement are very liable sources of nutritional information	44	88	06	12
7	It is the coach's responsibility to stress good nutritional practices	38	76	12	24
8	The athlete should schedule his/her activities so he/she has time to eat	50	100	00	00
9	Learning about nutrition is not important for athlete because they eat so much food they always get nutrients their body need	06	12	44	88
10	Learning facts about nutrition is the best way to achieve favourable changes in food habit	41	82	09	18
11	Nutritional counselling would be important to the athlete who is trying to change his/her weight	50	100	0	00

CONCLUSION AND RECCOMMENDATIONS

Knowledge, attitudes of nutrition and dietary intake is a sine qua non to optimum and good performance in sporting activities and competitionsto any 21st century athletes including student-athletes ofFederal College of Education, Abeokuta. This study has been able to reveal that there was poor knowledge among student-athletes under this study even though their attitudes were not affected by their poor knowledge, it was as well discovered that their poor knowledge could be as a result of unconventional medium of information sources widely used among them like internet, friends, family and so on. To this end, the following recommendations were madefor the study:

1. There should be an immediate complete reassessment of the nutritional knowledge of all the student-athletes in Nigerian Higher Institutions of learning to ascertain their actual knowledge in relations to their sporting activities and participation.
2. The College Management in collaboration with the Coaching Crew should regularly organisenutrition educational workshops and courses which are necessary to improve the nutritional knowledge andattitudes of student-athletes in the college.
3. The practical and applied information, relatedto basic nutrient requirements, contribution of nutrients from different food groups and their portion size aswell as on the use of nutritional supplements, shouldregularly be provided to the student-athletes, this will discourage all formsof unorthodoxinformation sources the student-athletes may be exposed to.

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