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MEASUREMENT of NUTRITIONAL KNOWLEDGE LEVEL of PHYSICAL EDUCATION TEACHERS

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ABSTRACT

This study aimed to determine the nutritional information levels of 60 Physical Education and sports teachers working in schools under the Directorate of National Education of Adiyaman province, method: a questionnaire was used to collect the data in this study. The questionnaire used is composed of two parts and 20 questions. Accordingly, the first part of the questionnaire consists of 4 questions related to demographic and introductory information from the participants. The second part of the questionnaire consists of 20 questions related to the measurement of nutrition information levels of physical education and sports teachers. Data SPSS 21. Analyzed with 0 programs. In order to test the reliability of the measurement, the Cronbach Alpha test was applied,

and the Cronbach Alpha coefficient was 0.581. Results: "consuming whole grain (brown) bread because of the vitamins it contains is beneficial for the central nervous system."He responded correctly to his proposition. In this study, participants mostly answered 88.1% (53 people) correctly about the source of vitamin D and what tasks the calcium mineral was used for in the body. Conclusion: the research does not say that the knowledge of Physical Education and sports teachers about nutrition is sufficient, so it is recommended that they are informed about nutrition.

Key Words: Physical Education, Sports, Nutrition, Teacher

INTRODUCTION

Nutritional science is a branch of science that is continuously evolving and developing. Nutritional information affects the behavior and attitudes of human beings and gives information about which food to eat or not. Individuals can obtain this information from dietitians and food labels. However, most people obtain nutritional information from radio, TV, newspapers, magazines, and the Internet (Tayfur, 2014). With nutrition education, it is aimed to improve the nutritional status of the public by training the public on the development of adequate and balanced food consumption habits, eliminating wrong and harmful nutrition practices, preventing the foods from becoming disruptive and more efficient and more economical use of food sources (Baysal 2002, Murathan et al. 2015). Studies have shown that nutritional education programs have an impact on nutritional knowledge, and as the education level increases, nutritional knowledge increases in parallel with this (Aytekin, 1999).

It is one of the critical focal points of our nutritional age. Today, millions of people struggle with the negativities caused by hunger and malnutrition, while another group loses their lives at an early age or cannot work due to excessive and malnutrition (Bilge, 2009). The concept of nutrition is that people consume the nutrients that are necessary for their survival (Çekal, 2007). Nutrition is not to feed the stomach, to suppress the feeling of hunger, or to consume the foods it wants at the moment (Besler, 2015). Nutrition is a correct and conscious behavior that needs to be done to protect health and improve the quality of life. This behavior should be continued in every period of life (Bilge, 2013). At the same time, nutrition should delight the individual and make him feel good. As can be seen from this, nutrition has beneficial effects on the physiological and psychological state (Yücecan, 2008).

Adequate intake and proper use of nutrients necessary for body growth, development, and functioning are expressed as adequate and balanced nutrition. The purpose of proper nutrition is to maintain adequate and balanced nutrition (Besler, 2015). Knowledge is power if we accept the fact that we are in the information society. We can define information as separating the knowing from the unknown. Nutritional information is nutritional and nutritional information. The energy content of nutrients, fats, six carbohydrates, proteins, sources of vitamins and minerals, sources of phytochemicals can be evaluated within the nutritional information. If the energy and nutrients cannot be taken as much as the body needs, malnutrition occurs, and the body's functioning decreases. Some of the nutrients cannot be taken into the body when healthy food selection is not made, and diversity is not provided, or wrong cooking methods are applied. This condition is called unbalanced nutrition. Malnutrition affects human health negatively by reducing the ability to work, plan, and discover efficiently.

Deficient nutritional information directly affects the growth and development of children. This situation indirectly creates negative situations in the structure of societies (Sabbag, 2011). It is stated that inadequate and unbalanced nutrition causes difficulties in mental and physical development, behavioral disorders, and a decrease in the average of intelligence (Oktar, 2003). An increase in the frequency of some chronic diseases was detected due to unbalanced nutrition. These patients are mostly health problems such as cardiovascular diseases, hypertension (HT), type 2 diabetes (DM), obesity, osteoporosis, constipation, diverticulosis, iron deficiency anemia (RIA), malnutrition (Besler, 2014).

Nutritional information can affect nutritional preference and nutrient intake. In one study, it has been shown that in the group with great nutritional information, the intake of total fat, saturated fat, and monounsaturated fat from animal origin is less than the group with low nutritional knowledge. It has been shown in several studies that nutritional information affects nutritional behavior. Nutritional education, access to healthy foods, and socioeconomic status are essential for nutritional behaviors (Dallongeville et al., 2001; De Vriendt et al., 2009; Brug, 2008).

The primary purpose of nutrition education should be to provide the individuals who make up the society with correct information and to gain better eating habits. The effects of nutrition on health should be conveyed to the society correctly, and the nutritional behavior awareness of society should be developed. Nutrition is a versatile behavior. Economic, social, cultural, personal, and religious characteristics and attitudes of individuals should be taken into consideration while training is given (Sakar, 2013; Sabbag, 2011). The main issue to be considered in the nutrition education of society is the use of precise information that does not cause information confusion in society. The individual needs to be educated to have a sufficient level of knowledge and to use clear and understandable methods to convey information (Kutluay, 2012).

In this study, it was aimed to measure the nutritional knowledge levels of physical education and sports teachers working in Adıyaman province.

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Research model

This research is descriptive in the scanning model. Screening models aim to describe a situation that exists in the past or still as it exists or tries to define that situation within its conditions and as it is (karasar, 1998; Balcı, 2005).

The Universe of the Research

The universe of the research consists of Physical Education and Sports Teachers working in schools affiliated to the Adıyaman Provincial Directorate of National Education.

Sample of the Study

60 Physical Education and Sports Teachers working in schools affiliated to the Adıyaman Provincial Directorate of National Education.

Data Collection Tools

In this research, a questionnaire was used to collect data. The questionnaire used was composed of two parts and 20 questions. Accordingly, the first part of the questionnaire consists of 4 questions about demographic and introductory information from the participants. In the second part of the questionnaire, it consists of 20 questions about determining the measurement of nutrition knowledge levels of physical education and sports teachers. Codes for determining the nutritional knowledge levels of physical education teachers: It is in the form of a 5-point Likert scale: "1: I disagree, 2: I disagree, 3: I am indecisive, 4: I agree, 5: I strongly agree". Therefore, as the arithmetic averages approached 1, the evaluation of physical education teachers' nutritional knowledge levels is negative, and as they approach 5, the evaluation of physical education teachers' nutritional knowledge levels is positive. In our research, the measurement of nutritional knowledge level was used for adults developed by Batmaz, 2018. The data were analyzed with SPSS 21.0 program. In the study, Cronbach Alpha test was applied to test the reliability of the measurement, and it was found that the Cronbach Alpha Coefficient was 0.581.

Evaluation of the Data

The data were analyzed with SPSS 21.0 program. In the study, Cronbach Alpha test was applied to test the reliability of the measurement, and it was found that the Cronbach Alpha Coefficient was 0.581. The Cronbach Alpha coefficient of 0.581 indicates that the reliability of the scale is a low level of reliability.

FINDINGS

Information on the gender of the participants is shown in Table 1. According to this, 71.4% (43 people) of the participants are men, and 28.3% (17 people) are women.

18.3% of the participants (11 people) 22-27 years, 41.7% (25 people) 28-33 years, 23.3% (14 people) 34-39 years, 13.3% (8 people) are 40-45 years old, 1.7% (1 person) is 46-50 years old and 1.7% (1 person) is 51 years old and above.

Table 1. Information on the gender of the participants in the research.

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	MALE	43	71,7	71,7	71,7
	FEMALE	17	28,3	28,3	100,0
	Total	60	100,0	100,0	

Table 2. shows information regarding the age of the participants.

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	22-27 Age	11	18,3	18,3	18,3
	28-33 Age	25	41,7	41,7	60,0
	34-39 Age	14	23,3	23,3	83,3
	40-45 Age	8	13,3	13,3	96,7
	46-50 Age	1	1,7	1,7	98,3
	51 and Over	1	1,7	1,7	100,0
	Total	60	100,0	100,0	

Table 3. shows the information regarding the professional year of the participants.

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	1-3 Year	10	16,7	16,7	16,7
	4-8 Year	31	51,7	51,7	68,3
	9 and Over	19	31,7	31,7	100,0
	Total	60	100,0	100,0	

16.7% (10 people) of the participants have 1-3 professional years, 51.7% (31 people) of 4-8 professional years, 31.7% (19 people) of 9, and more professional years.

Table 4. shows the related information of the participants of the research on the type of school.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STATE	51	85,0	85,0	85,0
PRIVATE	9	15,0	15,0	100,0
Total	60	100,0	100,0	

85.0% (51 people) participating in the study work in public schools, and 15.0% (9) people work in private schools.

Table 5. Cronbach's Alpha number

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,581	,586	20

Cronbach Alpha is the (α) alpha coefficient method developed by Cronbach to estimate the reliability of the measurements (Turgut and Baykul 2010). If the alpha coefficient is between 0.00 and 0.40, the scale is unreliable, if between 0.40 and 0.60 the scale is of low reliability, if it is between 0.60 and 0.80, it is highly reliable, and between 0.80 and 1.00 it is high is a highly reliable scale (Özdamar, 2011). The Cronbach Alpha coefficient of 0.581 indicates that the reliability of the scale is a low level of reliability.

According to Table 6, the participants are a good source of vitamin A in question 2, the nutritional value of frozen products in question 5 is lower than that of fresh foods, in question 10, fats contained in processed meat products such as salami and sausages are harmful to health. Calcium mineral in milk and dairy products is vital for bone and dental health, and the vitamin C contained in question 14 protects against colds and flu infections by strengthening immunity, and I strongly agree that physical education and sports teachers can do this. Shows that he knows. At the same time, physical education and sports teachers question 1 shows that natural freshly squeezed juices do not contain sugar, and in question 20, fats contain less energy than protein and carbohydrates, and they do not have enough information about this subject by giving the wrong answer.

Table 6. shows the information regarding the average of the answers given by the participants of the research to the questions.

	N	Mean	Std. Deviation
s1	60	2,4667	1,44347
s2	60	4,0500	,94645
s3	60	3,5500	1,37070
s4	60	4,2167	1,00998
s5	60	4,4000	,97772
s6	60	2,9667	1,85003
s7	60	3,5833	1,12433
s8	60	2,0667	1,10264
s9	60	4,0167	,83345
s10	60	4,5833	,82937
s11	60	4,6167	,66617
s12	60	4,4167	,78744
s13	60	3,6500	1,14721
s14	60	4,5333	,56648
s15	60	3,7833	1,04300
s16	60	1,5000	,87333
s17	60	3,7333	1,17699
s18	60	3,6333	,90135
s19	60	3,4833	1,09686
s20	60	2,8667	1,44347
Valid N (listwise)	60		

DISCUSSION AND CONCLUSION

Nutritional information: It is one of the most critical factors affecting the nutritional status and habits of individuals, families, and societies (Baysal, 2011). According to the data, it can be concluded that the nutritional knowledge level increases depending on age. In the study conducted by Çekal on the nutritional knowledge levels of middle-aged and elderly individuals in 2008, 76.3% of the participants in the groups aged 64 and below were adequate and proper, and 74.2% of the participants aged 65 and over were adequate and proper. She reported. Because of this difference, Çekal attributed the education level of those aged 64 and under to higher than individuals aged 65 and over. In the research conducted, 48.3% (29 people) of the participants answered the question correctly, and 38.3% (23 people) answered the question correctly. Most of the participants 60% (36 people) "The nutritional value of frozen

products is lower than that of fresh foods." They answered correctly in the form of strongly agree with the proposition. Among the 20 questions asked by answering the question that red meat and purple-colored vegetables and fruits are protective of cancer, 35% of the participants were the most answered among the 20 questions asked. This situation may negatively affect people's nutritional behavior.

Most of the participants, 35.6% (21 people) agree, 28.8% (17 people) agree, "It is beneficial for the central nervous system to consume whole-grain (Brown) bread because of the vitamins it contains." He answered the proposition correctly. Whole-grain bread has a higher vitamin and mineral content (Baysal, 2009). Bread consumption is high in our country. Therefore, the ability of individuals to choose more nutritious bread can be useful in preventing future health problems.

Vitamin B12 is an essential vitamin for the nervous system and pernicious anemia. In its deficiency, anemia, headache, fatigue, depression, forgetfulness, and similar cognitive deficiencies can be observed. The best sources are animal foods. Most of the participants in this study, 62.2% (37 people) responded correctly to the suggestion that vitamin B12 is effective in preventing obesity. The fact that individuals have information about the functions of vitamins and minerals in the body provides convenience in preventing diseases and healthy nutrition.

Vitamin C has been reported to increase the levels of IgA, IgM, and complement, and inhibit the activity of viruses, which are among the immune elements in human serum. It protects the body from infections and bacterial toxins. Its best sources are fresh fruits and vegetables. In this study, 96.7% (58 people) of the participants responded correctly to the proposition regarding vitamin C.

Vitamin D is a vitamin that regulates calcium metabolism. With this feature, it provides the bones and teeth to harden. The body can make vitamin D under the influence of the sun's rays. It is found mostly in fish liver. The first function of calcium is to protect the development and health of bones and teeth. In calcium deficiency, osteoporosis may be observed. Its best sources are milk and its products (Baysal, 2009). In this study, the participants responded mostly to 88.1% (53 people) about the vitamin D source and what tasks the calcium mineral used in the body.

There are trans fats in processed meat products (Baysal, 2009). Trans fatty acids are metabolized like saturated fatty acids and can, therefore, increase cholesterol. They are harmful to health because they increase bad cholesterol called LDL in the blood (Bulduk, 2005). "Fats in processed meat products such as salami and sausages are harmful to health." 95% (57 people) of the participants stated that they absolutely agree and agree.

Most of the individuals participating in this study, 78.3% (47 people) knew that olive oil does not contain cholesterol. Individuals need to know the foods that are cholesterol source in order to prevent the development of heart and vascular diseases.

In line with the principle of "Nutrition is the basis of health," suggestions should be made to increase the nutrition knowledge level of physical education and sports teachers. Nutritional knowledge levels of people working in essential groups such as education and health of the society should be determined; Then, other sections of the society should be reached through various projects. Public education centers, cultural centers, to increase and improve the nutritional knowledge levels of individuals. Nutrition education should be given in the institutions, the nutrition education to be given should be given in a language that everyone can understand, taking into account the educational background of the people who will receive the education. In our country, nutrition awareness should be established in the primary education curriculum not only within the scope of science technologies, but also as an elective course, or within the scope of the courses given to the parents in schools, and the society should prevent nutrition awareness.

As a result; According to Table 6, the participants carrots are a good source of vitamin A in question 2, the nutritional value of frozen products in question 5 is lower than that of fresh foods, and the fats contained in processed meat products such as salami and sausages in question 10 are harmful to health. Calcium mineral in milk dairy products is vital for bone and dental health, and vitamin C contained in question 14 protects against colds and flu infections by strengthening immunity. I strongly agree that physical education teachers have sufficient knowledge on this subject. At the same time, physical education and sports teachers show that natural freshly squeezed juices are sugar-free in question 1, and fats contain less energy than questions protein and carbohydrates, and they do not have enough information about this issue by giving the wrong answer in the form of strictly agree.

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