Nutrition Awareness Level of Al-Balqa Applied University Students

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Abstract

This study is intended to find out the Nutrition Awareness level of al-Balqa Applied University Students. It surveys the perspective of sample of a seventy-two students of Ajluon University College/Al-Balqa Applied University in Jordan .The study indicates that the students' awareness ranges between low and medium. It shows that there are statistically significant differences among the variables of the study instrument ,specifically the students' majors   which are higher for science students, whereas there are no significant differences related to the year of study. The study comes up with a set of recommendations**.**

Key words: awareness level, nutrition awareness, malnutrition, nutrition

1.Introduction

Nutrition education plays a significant impact on the individuals' nutrition as they choose the quality and quantity of the diet necessary for their bodies daily needs that suit not only their development stages such as adolescence and adult hood, but also their health states, work or activity and sickness(Weker; Rudzka-Kantoch; Strucinska, 2008).

Nutrition awareness provides the modern basics fostering the daily life skills that enhance and reinforce the right nutrition practices in a specific social and economic context. This awareness may provide the knowledge and the skills that help the family produce, buy and prepare the diet they need. This requires knowing the elements of nutritional diet in addition to the methods enabling the individuals to satisfy their needs with food resources (FAO,1997**).**

2. Review of Related Literature:

Due to the significance of the nutritional awareness, a lot of studies have been carried out. Following are some the studies related to food and nutrition.

Al-Sayyed (2005) emphasizes that nutritional education is an attempt to transfer information to the individuals and modify their behavior , their health and nutritional patterns according to the means available to provide them with advice and information related to their diet.

Subhy (2004) mentions that the most important objectives of nutrition education are: teaching the individuals the nutritional components, designing balanced meals suitable for the nutritional needs which vary according age, sex, physical status, type of work and effort-, teaching the individuals methods of preparing food in ways that retains almost perfectly its nutritional components ,and finally showing the close connection between nutrition and the individual's growth , health and ability to work.

Likewise , nutritional awareness is an aspect of health care ,and is a significant element in treating a lot of illnesses . For example ,the tips given to the patient by the nutritionist at the hospital have an integral role with other aspects of health care(Al-Nassery,2009).

Some studies indicate that the individuals' nutritional awareness has substantial impact on their nutrition and health. Illnesses occur because of malnutrition caused by lack of awareness rather than the lack of the physical elements of diet patterns of the patients (Trost, Sirard, Dowda, 2003).

. Britten, et al (1998), conducted a study to find out the relationship between time taken to teach nutrition education and other variables related to teachers such as nutritional training, self-efficiency, beliefs, and information. The researcher used a survey involving a sample of (324) primary school teachers of nutrition education. The study showed that the teachers' nutrition knowledge indicated their self-efficiency as teachers of nutrition education. Self-efficiency is the direct relationship between nutrition knowledge and on-job training.

Cathi.et al., (1999) conducted a study to provide the low income individuals with nutrition information through home study (the nutrition programs were sent by mail). The sample of the study consisted of (201) members. A questionnaire to evaluate the member's diet patterns before and after they received the information. It showed that the members of study were able to cut down the cost of food buying without reducing the level of consuming nutritional diet needed for their bodies , though taking high calorie fdiet was cut down as compared to consuming other foods like fruits and vegetables.

Fakhrou (2003) carried out a study to find out the nutrition awareness of the teacher- students majoring in home economy at the Faculty of Education-Qatar University, as compared to that of other students majoring in different programs. The sample of the study consisted of (275) students. The study showed that the nutrition awareness of the teacher-students majoring in home economy was low, but there were no statistically significant differences that could be attributed to the major of study or nationality.

Nicola J Supurrier et al.,(2008) examined the relationship between the environment of household properties and physical activity and the nutrition pattern for kindergarten children. Home visits were made to get data through direct observation and personal interviews with the parent as regards to the physical and nutrition properties of the household. Standardized questionnaires for the parents were used to measure the child physical activity, the unhealthy practices and the diet patterns. The study showed that the cut down on the consumption level of vegetables and fruits was connected to reminding the children of the necessity of taking the food and providing with them nutritional incentives to take the basic meal. The rise in consumption of non-basic diet was connected to furnishing the child with supplementary food besides incentives for the basic meal.

Qaddoumy amd Zayyed(2009) identified the nutrition level of the physical training students at Al_Najjah National University and Sultan Qaboos University according to the variables of university, sex ,year of study , the cumulative average besides identifying the most predictive item of whole level of awareness. The study involved a sample of (207) student: (105) from Najjah University and (102) from Qaboos University .The showed that the sample's general nutritional awareness was low. The respondents' percentage was (59%), whereas the there were no statistically significant differences in the nutritional awareness according to the university , sex , year of study variables. However, there were statistically significant differences pertaining to the cumulative average; the differences were higher for higher cumulative averages. Five items were found to have ability to predict and explain (%77.4) of the nutritional awareness.

Thus, the previous related studies, have emphasized the necessity of developing the nutrition concepts and knowledge through the teaching process both at schools and universities. More importantly there is evidently low awareness of the general education students' nutritional awareness that can be ascribed to the teaching curricula and the nutritional educational programs.

2.1 Problem of the Study:

The individuals' nutritional awareness affects the nature of their nutrition. As the nutritional awareness level improves, so does the individuals' knowledge of the importance of nutrition elements .This knowledge alsa enables the individual to recognize role of nutritional elements in maintaining the right growth of the child and enabling the body to carry out its vital functions and protection from malnutrition diseases. Arab states face a lot of problems related to nutrition as Musaiger(200) emphasizes that lack of nutrition and health awareness in the Arab World causes a lot of these problems. Therefore, the problem of this study has been limited to answering the following questions:

1. What is the nutrition awareness level of Al-Balqa Applied University Students?
2. Are there any differences at (α=0.05) in al-Balqa Applied University Students' nutrition awareness level attributed to the major and the year of study?

3.1. Significance of the Study:

This study is important for theory and application as follows:
- The theoretical Importance: This study is significant because it adds to the theoretical literature that lacks theoretical studies in the field. Therefore, it may take part in enriching the library in this respect.
- The Applied Importance: The objective of this study is find out the level of nutritional awareness of Al-Balqa Applied University students(in Jordan). As such, , it aims to provide the nutrition authorities at Al_ Balqa University with facts pertaining to the students nutrition awareness so

that these authorities take practical measures that can optimize the students nutrition awareness and bring it up to the targeted level.

2.2 Objectives of the Study:

The objectives of the study are:

1. Finding out the nutrition awareness level according the perspective of sample of Al-Balqa University students.
2. Knowing the major statistical differences in the nutrition awareness according the qualitative properties of the sample members.
3. Opening the way for other studies in environments similar to Jordan.

2.2 Operational Definitions :

Awareness Level: the student's score on the nutrition awareness as measured by the instrument prepared for this study.

Nutrition Awareness: the student's knowledge about the basics of the right nutrition, its significance and basics. It is measured in this study by the nutrition awareness measurement instrument.

2.3 Limits of the Study:

The study is limited to:

1- A sample of Al-Balqa Applied University for the year 2012-13
2- The reliable and valid nutrition awareness measurement instrument

3. Procedure of the Study:

3.1 The study approach:

The descriptive analytical approach is adopted for the study. It is an approach that studies an existing phenomenon, event or case from which information can be obtained to answer the study questions without intervention by the researcher.

3.2 Population and Sample of the Study:

A sample of (72) members was randomly selected from the students of Ajloun University College – Al_ Blaqa Applied University . The table below shows the properties and distribution of the sample members

table-1

Frequency and percentage of the variables of the study

	Type	number	Percentage
Major	science	25	34.7
	literature	47	65.3
Year of study	first	29	40.3
	second	13	18.1
	Third +	30	41.7
total		72	100

3.3 The Study Instrument:

Reviewing the educational literature (studies by Qudwah, Zayyed and Fakhru) and other studies related to the topic of the questionnaire, the researcher designed the instrument of the study as follows:

1- Formulating the items of the questionnaire according to their respective domains.
2- Drafting the questionnaire and then presenting it to a panel of referees.

4.The Psychometric Properties of the Questionnaire:

4.1First Validity of the Questionnaire:

To ensure the validity of the questionnaire, it was reviewed by a panel of ten referees who are experts in nutrition, social science, psychology, evaluation and measurement in some of the Jordanian universities. They reviewed the items and their domains, the validity of the contents and whether they measure what they are supposed to measure. The questionnaire was modified according to the recommendations of the panel.

4.2.Reliability of the Study Instrument:

To ensure the reliability of the instrument, the internal consistency, of a sample of (25) students, was calculated according to Cornbach alpha and the value was (0.77) which is suitable for the study.

Table-2

Types and percentages of the study variables

	Type	Number	Percentage
Major	science	25	34.7
	literature	47	65.3
Year of study	first	29	40.3
	second	13	18.1
	Third +	30	41.7
total		72	100

4.3 Grading the Instrument of the Study:

Each correct answer to an item is given one grade, and zero for incorrect or 'I do not response' . The total grade of the nutrition awareness instrument used is (25).

4.4Variables of the Study:

The variables of the study are:

First: The Independent Variables:

1- Major : science   literature
2- Year of study: first   second   third +.

Second: Dependent Variables:

Level of nutrition awareness

4.5 **Data Collection**:

To collect data of the study sample , the researcher followed these steps:

1- The population and sample of the study were identified and then selected from the Ajloun University College-Al- Balqa Applied University.
2- Obtaining the official approval to apply the study
3- Designing the instrument of the study and ensuring its reliability and validity.
4- Applying the study to the sample members.
5- Concluding the results and presenting them for discussion to come up with proper recommendations

4.Results of the Study:

   The First Question: What is the nutrition awareness level of al-Balqa Applied University Students?
To answer this question, the mean scores and Standard Deviations for nutrition awareness level of al-Balqa Applied University Students were calculated as shown in table-2 below.

Table -2
The descending order of the mean scores and standard deviations(STD) for nutrition awareness level of al-Balqa Applied University Students

Table-2 shows that the mean scores are between (0.19-0.99). Item (13) "The pregnant mother needs additional food" came first with a mean score of (0.99). The second came item (12) "Teething babies need milk (a source of calcium). With a mean score of (0.97).Item (1) "Proteins are the substances needed for building and renewing the cells." Came third, with a mean score of (0.92) .Item (8) "Vitamin C is found in vegetable oils especially the sesame oil" came last with a mean score of(0.19). The total mean score   is (15,43).

Rank	No.	Item	Mean	STD
1	13	The pregnant mother needs additional food	0.99	0.118
2	12	Teething babies need milk (a source of calcium).	0.97	0.165
3	1	Proteins are the substances needed for building and renewing the cells.	0.92	0.278
4	5	Vitamins enhance protection against diseases	0.89	0.316
4	22	Obesity is caused by consuming vegetables and fruits .	0.89	0.316
6	11	Brown bread and vegetables are rich in nutritional fibers.	0.87	0.333
7	14	Children need more proteins than the adults.	0.86	0.348
7	18	Sea foods are rich in iodine	0.86	0.348
9	10	Excessive consumption of foods high in sugar (carbohydrates) generally raises the glucose in the blood.	0.82	0.387
10	16	Mental growth is related to nutrition	0.81	0.399
11	24	The main source of the body energy is consumption of foods high in sugar (carbohydrates).	0.75	0.436
12	21	Excessive consumption of carrots tans the skin yellow.	0.69	0.464
13	21	Pasteurization is suitable for preserving all kinds of food.	0.68	0.470
14	17	Consuming a source of food rich in iron help building the blood hemoglobin	0.60	0.494
15	3	Protein is low in red meat	0.57	0.499
16	23	Gout patients should cut down protein consumption	0.50	0.504
17	25	Vitamin A deficiency means night-blindness	0.47	0.503
18	6	Vitamin E is available in vegetable oils like corn oil and cottonseed oil.	0.36	0.484
19	4	The carbohydrates provide T.B(tuberculosis) patients with energy	0.32	0.470
19	19	Milk is an important source of iron.	0.32	0.470
21	9	Drinking coffee or tea directly after meals help absorbing iron.	0.31	0464
21	20	Foods preserved by the Sun dehydration have high nutritional value.	0.31	0.464
23	7	Vitamin K, which is found in green vegetables, has an important role in blood clotting.	0.26	0.444
24	2	Vegetables and fruits are rich in protein.	0.22	0.419
25	8	Vitamin C is found in vegetable oils especially the sesame oil.	0.19	0.399
		Total	15.43	3.267

The Second Question:

The question is divided into parts:

a- Are there any differences at (α=0.05) in al-Balqa Applied University Students' nutrition awareness level attributed to the major of study?

To answer this question the mean scores and standard deviations of the students' nutrition awareness level attributed to the major of study were calculated. T- Test was used to find out the statistical differences among the mean scores as shown in table-3.

Table-3:

The mean scores and standard deviations and the T- values of the students' nutrition awareness level attributed to the major of study

		Number	Mean	STD	t-value	Freedom grade	Statistical significance
total score	Science	25	16.56	3.417	2.197	70	0.031
	literary	47	14.83	4.053			

Table -3 shows that there are statistically significant differences at (α=0.05) that can be attributed to the major of study. The science members scored higher than the literary ones.

b- Are there any differences at (α=0.05) in al-Balqa Applied University Students' nutrition awareness level attributed to the year of study?

To answer this question the mean scores and standard deviations of the students' nutrition awareness level attributed to the year of study were calculated as shown in table-4

Table-4

The mean scores and standard deviations of the students' nutrition awareness level attributed to the year of study

Year of study	Number	Mean score	STD
first	29	16.21	3.342
second	13	15.15	3.934
Third +	30	14.80	2.809
Total	72	15.43	3.267

Table -4 shows that there is an apparent variation in the mean scores and standard deviations in the Al-Balqa Applied University Students' nutrition awareness level attributed to the year of study. To find out the statistically significant differences, the variance analysis was used as shown in table-5

Table-5.: the variance analysis of the year impact on the nutrition awareness of Al-Balqa Applied University:

source	Total of squares	Freedom degree	Means of squares	f- value	Statistical significance
Inter-groups	30.402	2	15.201	1.442	
Intra-groups	727.251	69	10.540		
Total	757.653	71			

Table-5 shows that there are no statistically significant differences at(α=0.05) that can be attributed to year of study.

5.Conclusion and Recommendations:

 5.1Results of the studyThis study is intended to find out the nutrition's awareness of Al-Balqa University for the academic year 2012-13. The questionnaire was used as instrument to collect the data that were processed by using the Statistical Package for the Social Sciences(SPSS).

The major results of the study are:

1- The mean of members' scores on the instrument of nutrition awareness ranged between medium and low. This result may be attributed the lack of specialized university nutrition courses. In addition, the basics of nutrition education at schools stages prior to the university stage seem to be inadequate to create students' nutrition awareness. This result goes with most of the previous studies like Fakhrou's(2003), Qaddoumy's and Zayyed(2009) , which indicated that the students' nutrition awareness level was low.

2- The results show that there are statistically significant differences that are attributed to the major of study (science and literature). This result may be attributed to the nature of the scientific specialties which include a lot of information pertaining to nutrition and the various substances elements. This may enhance the students' nutrition awareness level of science students.

3- The study shows that there are no statistically significant differences in the students' nutrition awareness that can be attributed to the year of study, because the students' nutrition awareness does not vary greatly on the whole. This can be attributed to the lack of university nutrition courses .Consequently; there are low levels of nutrition awareness among all students regardless of the year of study. There are also no significant differences that can be attributed to the year of study as shown by this study. This result goes with Qaddoumy and Zayyed's(2009) study, which revealed that there were no significant differences that could be attributed to year of study variable.

5.1.2Recommendations of the Study:

In light of the results of this study, the researcher recommends the following:

1- Promoting the education of nutrition awareness through sight and sound media.
2- Embedding the programs of the right nutrition in the curricula of the general education schools.
3- Introducing compulsory university courses to optimize the nutrition awareness level of college students to accomplish an integrated image of the students' nutrition awareness in Jordan.

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