

An Evaluation and Exploration of Nutrition Education in Secondary Schools

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Abstract

Food is the basic requirement of every individual to fulfill the energy needs and to meet the developmental requirement of the body. The food which we eat is known as 'Diet'. The energetic food in our diet consists of various types of essential chemicals for our body termed as 'nutrients'. Thus the science which deals with nutritious diet and its importance for the individual is known as 'nutrition'. The nutritious diet directly affects the health of an individual. Being physically active and limiting your sedentary behavior every day is essential for your health and well being. Health nutrition education has been part of the schooling program. The health promoting school is a recently developed concept which seeks to provide multi-faced approach to school health. It will provide a better frame work and opportunity to assist schools and address the health issues of their students and will focus on primary school findings to indicate health gains for primary school students. The World Health Organization (WHO) played a key role in shaping the directions of school health school based programs which can play an important role in promoting lifelong healthy eating habits. Nutrition education should be a major education component of all child nutrition programs offered in all school and child care facilities.

Keywords: Evaluation, Exploration, Nutrition, Education

Introduction

"The process of the body using food to sustain life; the study of food and diet." But nutrition also connects to the whole food system. The wide variation in seed and animal varieties, the way those plants and animals are raised, the harvesting, processing and marketing -- including the people, natural resources and political and economic forces that impact it -- all these are part of the food system, and so all these impact nutrition. There are two main types of chronic nutritional problems that are found at either ends of the spectrum of malnutrition: those due to insufficient intake of good quality and safe foods, and those due to an excessive or unbalanced intake of food or certain types of food. Both can be prevented or reduced with an adequate or proper diet.

Whether food supplies are scarce or abundant, it is essential that people know how best to use their resources to access a variety of safe and good quality foods; to ensure nutritional wellbeing. To be food secure and adequately nourished, households need sufficient resources to produce and/or purchase adequate food. In addition, they need the understanding of what constitutes an appropriate diet for health, as well as the skills and motivation to make sound choices on family care and feeding practices.

Food and nutrition education thus play a vital role in promoting food security, as it is especially important for poor households to make optimal use of local foods and practice healthy eating patterns. Effective nutrition education is also important for combating the rise in non-communicable, diet-related diseases seen in many countries.

The health education program should include providing information, exploring values and attitudes, making health decisions, and acquiring skills to enable behavior change to take place. Health education program should also train people to develop self esteem and self empowerment so that they are enabled to take action about their health. In broader terms, one can define health education as providing health information, helping people to change their attitude and behavior towards healthier lifestyles, and empowering people to look after their own health. The World Health Organization defines the process of enabling people to increase control over, and to improve, their health as “health promotion”. Modern school health education should therefore include training in health promotion skills. This means acquiring the knowledge and skills for working with people to promote health in many different situations with a variety of different aims.

Review of Literature:

R. REDDY (2014) Childhood obesity is a significant problem in the develop States. Obese children suffer from a variety of physical, emotional, and social consequences. To curb or reduce this problem, school-based nutrition education interventions have become more common. However, little research has been conducted concerning nutrition-related socioeconomic disparities in behavior change constructs for low and high income children, which is integral to forming appropriate theory-based interventions and allocating resources appropriately. Research into classroom teachers’ perspectives is also an area in need of strengthening to better inform interventions. Finally, the School Enrichment Kit Program (SEKP), a current interactive, classroom-based, nutrition and physical activity curriculum for K-2 grades is a unique intervention that necessitates evaluation to justify further use. The purposes of this study were to:(a) develop, validate, and test a survey instrument measuring behavior, self-efficacy, and knowledge for elementary students, (b) determine differences in behavior, self-efficacy, and knowledge for low and high income students, and the relationships between these constructs,(c) evaluate a novel K-2 nutrition and physical activity curricula, and (d) explore teachers’ experience of nutrition education. Among all four studies, a total of 10 teachers and 482 students participated. Surveys with students were conducted in their regular classrooms and observations, interviews, and document analysis were conducted with teachers. The survey developed in this study was found to be a valid and reliable tool for nutrition and physical activity measurement in fifth grade students. Comparison of low and high income schools demonstrated significantly lower knowledge and behavior scores in low income, as well as differences in construct relationships. SEKP was determined to be effective at improving vegetable consumption, breakfast consumption, and some knowledge. Finally, teachers identified five themes as part of their nutrition education experience: Meaningful roles, importance, mutual perceived influences, supplementary education and motivation, and barriers. These studies demonstrate that more resources may need to be allocated to the socioeconomically disadvantaged, the interactive SEKP is a promising intervention and should be further investigated, and teachers are highly invested in nutrition education, so efforts should be made to reduce their barriers.

Analysis and Interpretation of Data:

SOURCES OF INFORMATION AND DATA COLLECTION:

We chose the particular school e.g. AMU ABK School (Girls and Boys) of Aligarh district. We approached the students of the school to conduct this survey through a well defined questionnaire to elicit information from the students. Both primary and secondary data was used.

Primary Data – there was the need to obtain data afresh and for the first time and to ensure objectivity with the data analysis. For the purpose of this study, primary data comprises responses obtained through questionnaire administered to target respondents under study.

Secondary Data – Secondary data consists of information's that already exist somewhere and may have collected for a different purpose. A number of websites, books, newspapers, magazines and research papers had been consulted.

POPULATION AND SAMPLE SIZE

Sample sizes refer to the number of respondents targeted for collecting data for researcher. The study was done on 100 AMU ABK High School students.

TOOLS In this present study the questionnaire prepared by world health organisation (WHO) for food and nutritional assessment was used. It is a valid and standard questionnaire prepared by WHO as per the Indian condition.

STATISTICAL ANALYSIS

The collected data were subjected to mainly percent analysis of every item of questionnaire to find out the role of media and sponsors. The significance of percent analysis was determined by employing Chi-Square.

RESULTS AND DISCUSSION

Table 1

FREQUENCY AND PERCENTAGE OF RESPONSES: YESTERDAY, HOW MANY TIMES DID YOU EAT/DRINK DAIRY, SUCH AS MILK, YOGURT OR CHEESE?

Type of Response	Frequency of Response	Percentage	Chi-square
Do not takes	21	21%	31.40*
One times	61	61%	
Two Times	9	9%	
Three Times	8	8%	
Four times	1	1%	

*Significant $\chi^2_{m5} (01) = 3.84$

Table 1 reveals that 61% high school children were given response that they takes dairy product one time in a day, while 21% says they don't take dairy product 9% says that they takes two times in a day while others three times 8% and four times 1%.

The chi-square analysis was carried out to check the divergence of the responses. Table 1 also reveals that obtained χ^2 value of 31.40 at 0.05 level of significance is greater than tabulated χ^2 value of 3.84. This

clearly indicates that a significant difference was found in the pattern of response for the item how many times did you eat/drink dairy, such as milk, yogurt or cheese.

Table 2
FREQUENCY AND PERCENTAGE OF RESPONSES: YESTERDAY, HOW MANY TIMES DID YOU EAT FRUIT?

Type of Response	Frequency of Response	Percentage	Chi-square
Do not takes	21	21%	29.90*
One times	41	61%	
Two Times	19	19%	
Three Times	18	18%	
Four times	1	1%	

*Significant $\chi^2_{m5} (01) = 3.84$

Table 2 reveals that 61% high school children were given response that they takes fruits one time in a day, while 21% says they do not take fruits 19% says that they takes two times in a day while others three times 18% and four times1%.

The chi-square analysis was carried out to check the divergence of the responses. Table 2 also reveals that obtained χ^2 value of 29.90at 0.05 level of significance is greater than tabulated χ^2 value of 3.84. This clearly indicates that a significant difference was found in the pattern of response for the item yesterday, how many times did you eat fruit.

Table 3
FREQUENCY AND PERCENTAGE OF RESPONSES: YESTERDAY, HOW MANY TIMES DID YOU EAT VEGETABLES?

Type of Response	Frequency of Response	Percentage	Chi-square
Do not takes	11	11%	28.30*
One times	55	55%	
Two Times	21	19%	
Three Times	10	18%	
Four times	3	1%	

*Significant $\chi^2_{m5} (01) = 3.84$

Table 3 reveals that 55% high school children were given response that they takes vegetables one time in a day, while 11% says they do not take vegetables19% says that they takes two times in a day while others three times 18% and four times 1%.

The chi-square analysis was carried out to check the divergence of the responses. Table 3 also reveals that obtained χ^2 value of 28.30at 0.05 level of significance is greater than tabulated χ^2 value of 3.84. This clearly indicates that a significant difference was found in the pattern of response for the item yesterday, how many times did you eat vegetables.

Table 4

FREQUENCY AND PERCENTAGE OF RESPONSES: YESTERDAY, HOW MANY TIMES DID YOU EAT FRENCH FRIES/ CHIPS?

Type of Response	Frequency of Response	Percentage	Chi-square
Do not takes	09	9%	4.3
One times	35	35%	
Two Times	35	35%	
Three Times	11	11%	
Four times	10	10%	

Table 4 reveals that 35% high school children were given response that they takes chips and French fries one time in a day, while 9% says they do not take chips and French fries, 35% says that they takes two times in a day while others three times 11% and four times 10%.

The chi-square analysis was carried out to check the divergence of the responses. Table 4 also reveals that obtained χ^2 value of 4.3 at 0.05 level of confidence is less than tabulated χ^2 value of 3.84. This clearly indicates that significant difference was not found in the pattern of response for the item yesterday, how many times you ate French fries / chips number of websites, books, newspapers, magazines and research papers had been consulted.

CONCLUSION

School children constitute major segments of Aligarh city whose health and nutrition status will indicate the trend of changing nutritional profile of this region. They constitute a large proportion and therefore, have a significant effect on the overall health status of the population of Aligarh city as well as in Aligarh Muslim University. It was revealed that only few of the students pay proper attention towards nutritional intake in his or her routine life. The study reveal that majority of children are not aware of the importance of physical exercise, importance of nutritional knowledge, importance of breakfast and the awareness about the overall health. In this study it was summarized that the teachers of university school do not pay proper attention towards the advancement of nutritional knowledge.

RECOMMENDATION

From the findings of the present research work the following can be enlist:

1. The present study should form the basis for a larger , location specific survey in Aligarh Muslim university school as well as Aligarh city also.
2. More cross sectional study also open up a basis for further investigation in the cross sectional as well as gender base school going children.
3. Multiple factors dietary investigation and their impact can also be an area of investigation.
4. Role of education and investigation programs on knowledge awareness and practice of school children about nutritional status can be the area of investigationz

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