



AWARENESS OF LIPIDS: A LAYMAN'S PERSPECTIVE

Dr. Mrs. Manjusha Atul Bhakay

Associate Professor, S.M.R.K.B.K.A.K. Mahila Mahavidyalaya, Nashik.

ABSTRACT Appropriate nutrition helps to prevent nutrition-related diseases through a diet containing the right amount of food constituents, namely nutrients required for body building and defense, energy supply, and regulatory functions. When foods are not consumed in quantities commensurate with individuals' body needs, malnutrition or over-nutrition may set in. The present study looked at the awareness of layman about lipids as a nutrient and explored the various information and misinformation they had regarding fats and oils, their role and importance in the body. The study was carried out by random sampling on 100 ladies from Nashik city with varying educational background. A simple questionnaire was used to gather information. It was concluded that, given the role played by nutrients in promoting health and optimal functioning in humans, counseling and education about diet and nutrition needs to be made a priority by all relevant professionals, including nutritional counselors, home economists, and dietitians.

KEYWORDS : Health, fats, cholesterol, balanced diet, lipids

INTRODUCTION:

Adequate and proper nutrition is an important aspect of a healthy lifestyle for all individuals. In recent years, the scope of public health practice has continued to expand given the call to promote sustainable health and nutrition. Eating practices and the nutritive value of consumed foods are becoming increasingly important areas of research [1]. Therefore, it is essential to promote an awareness of the nutrients contained in foods in relation to their roles in body maintenance, growth, reproduction, health, and disease prevention in humans.

The nutritional intake of individuals in developing countries appears to be undergoing a transition from high-fiber, calorie-sparse, low-protein diets to low-fiber, calorie-dense, and high-protein diets [2]. This changing pattern, particularly with respect to carbohydrate intake, appears to be a contributory factor to the increasing prevalence of obesity, which is a major risk factor for many non-communicable nutrition-related diseases such as hypertension, diabetes mellitus, cardiovascular diseases, stroke, and nutrition-induced cancer. The World Health Organization (WHO) reported that nutrition-related diseases account for about 60% of all deaths, and 43% of the global burden of disease, [3] and that by 2020, the impact of nutrition-related non-communicable diseases is expected to rise to 73% of all deaths and 60% of the global burden of disease [4]. According to the WHO, the conditions that promote unhealthy eating practices among individuals include a lack of adequate health and nutritional knowledge, and the acquisition of misinformation about health and nutrition matters [5].

Objectives of the study

The study aimed at:

1. Examining the awareness of lipids in the general population of home makers.
2. To find out their concepts regarding nutrients.
3. To gain information about the concept of balanced diet in these women.

Selection of Sample and Data Collection: This study was carried out in the city of Nashik, Maharashtra State. 100 participants were selected by random sampling method. The participants were literate females who were involved in purchasing and cooking of meals in the house. A simple questionnaire was given to them which included awareness about balanced diet, nutrients and their function in the body, fats and cholesterol.

Statistical Analysis of Data: Statistical analysis was done by using SPSS software version 16.0. Percentages, means, frequencies were calculated for all the parameters under study.

RESULT AND DISCUSSION:

Nutritional awareness seems to be directly linked to nutritional knowledge, attitudes, and actions, which may have an effect on people's eating practices. Nutritional awareness is also related to knowledge of the interrelationships between nutritional matters and human life, which may have an effect on a person's life. To study the

general awareness among the respondents about nutrients and balanced diet, few questions were asked. The results are shown in table no. 1.

Table 1: General awareness of the respondents about nutrients and balanced diet

Category	Responses of women	No. of Respondents	Percentage %
Awareness about nutrients present in foods	Yes, they are aware	81	81
	No, they do not know	19	19
	TOTAL	100	100
Name of nutrients present in food.(Name them)	Answered correctly	10	10
	Answered incorrectly	05	05
	Partially correct	62	62
	Any other answer	03	03
	Not answered	20	20
	TOTAL	100	100
Awareness about the concept of balanced diet. (Definition of a balanced diet)	Defined correctly	11	11
	Defined incorrectly	19	19
	Defined Partially correct	21	21
	Any other answer	33	33
	Not answered	16	16
	TOTAL	100	100
What according to you causes obesity?	Eating too much of oil.	20	20
	Eating too much of ghee.	24	24
	Eating too much of sugar.	05	05
	Eating too much of proteins.	10	10
	All of the above.	35	35
	Any other.	06	06
	TOTAL	100	100

Table no. 1 reveals that majority of the women respondents (81 %) were aware of the nutrients present in food, whereas 19 % of the women said that they had not heard of the term "nutrients". Though a majority of women were aware of the nutrients present in food, when asked to name the nutrients, only 10 % could identify correctly all the seven essential nutrients required for sustaining life. 62 % were aware of Carbohydrates, proteins, fats, vitamins and minerals. They did not consider water and fiber as essential nutrients. 20 % of the women did not answer the question. 89 % of them had heard about carbohydrates, proteins and fats.

The study revealed that, out of the total 100 respondents, only 11 (11 %) could give the correct definition of balanced diet. 21 % of the

women defined balanced diet partially correct, stating that, balanced diet includes chapatti and bhaji. According to 33 % women, the concept of balanced diet was having meals twice a day, avoiding junk food.

44 (44 %) respondents knew that consuming too much of oil or / and ghee causes obesity, 10 % stated that eating too much of proteins causes obesity, while only 5 % respondents knew that eating too much of sugar (a simple carbohydrate) can also lead to obesity. 35% thought that all the factors were responsible for increase in weight. 6 % mentioned that eating too much of wada pav, samosa, missal causes obesity.

According to the WHO, Cardio Vascular Disease is the number one cause of death globally, accounting for 30% of total mortality [6]. In the 1970s, a link between total/saturated fat consumption and the risk for heart disease mortality was established, however, more recent studies in nutrition science point out that an independent relation between fat intake, especially saturated fat, and cardiovascular conditions, has not been consistently shown.

Does oil contain cholesterol

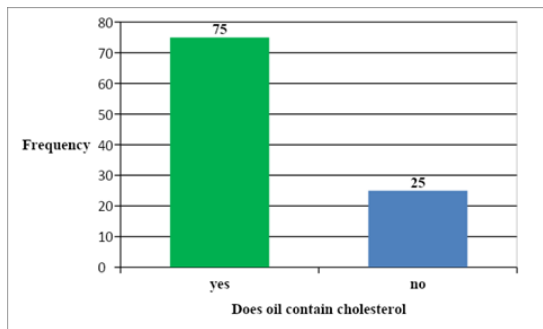


Fig. No.1: Frequency of cholesterol content of oil

Fig. no. 1 indicates that 75 % of the women thought that oil contains cholesterol. Cholesterol is the most vilified and misunderstood nutrient in our food. The fact being that, cholesterol is the principal modified steroid or sterol, that is synthesized in the liver and it is vital to human life. All animal foods like meat and dairy contain cholesterol to varying extents. Plant sources do not contain cholesterol, but, generally contain a cholesterol-like compound named Phytosterols.

Influence of advertisement:

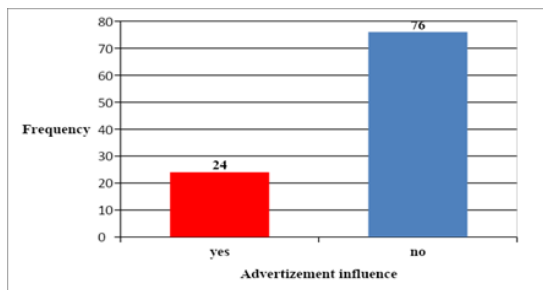


Fig. No. 2: Frequency of influence of Advertisement

Fig no. 2 reveals that majority of the subjects 76 (76 %) were not influenced by advertisements, while 24 % of the subject were influenced by the advertisement of oils shown on television. Because of the attractive, effective advertisement, these subjects were tempted to try new oils / fats.

Media is a major source of information and many a times misinformation on nutrition. Media through its advertising promotes unhealthy foods which are a rich source of sugars, fats and salts as the ideal food choices. According to Fetting, manufacturers spend a lot of money on advertising because it has a very effective influence on the food choices of viewers. Television in particular, is responsible for majority of the unhealthy eating habits today. Television, according to Samour and King , is the primary media influence on children of all ages. They have also argued that television viewing and low levels of physical activities are associated with over-weight and obesity, and

television watching has been inversely linked to intake of vegetables and fruits.

Should oily food be taxed

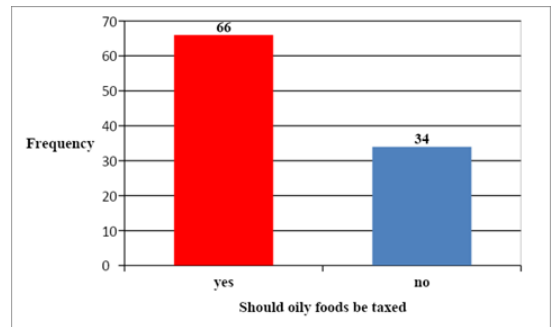


Fig. No.3: Frequency of taxation for oily foods

Fig. No 3 shows that a majority of the subjects (66 %) thought that fried foods should be levied a tax, so that the consumption of these foods may be reduced, thereby helping to maintain good health. While the remaining 34 % did not feel that taxing the oily foods would reduce their consumption.

Epstein LH et al observed that taxes or subsidies influence purchasing of food items. They studied 199 female shoppers in an experimental store, where selected low nutrient dense foods (e.g. sweetened beverages, candy, salty snacks) were taxed, and fruits and vegetables and bottled water were subsidized by 12.5% or 25% in comparison to a usual price. They concluded that taxes and subsidies can influence energy purchased for products taxed or subsidized, but not total energy purchased. However, the improvement in nutrient quality with subsidies indicates that pricing can shift nutritional quality of foods purchased.

Dellava JE et al examined taxation as a means to reduce consumption of unhealthy food items. They collected information from adults aged 25 to 55 years who participated in the nationally representative Russian Longitudinal Monitoring Survey. Twenty-four-hour dietary recalls, detailed food expenditure data, and community-level food prices collected over 1994-2005 were used for these analyses. Longitudinal random effects models were used to test the relation of time on the structure of diet while controlling for total household expenditures. They observed that Percent fat from fats and oils continued to decline with rising costs. Price changes led to substantial shifts in the structure of food consumption. However, except for the most expensive items, consumption of items returned to levels consumed in the former Soviet Union following price stabilization.

CONCLUSION:

Dietary fats are important for maintaining good health. Contrary to the belief that there was a link between fat intake and cardiovascular disease, recent advances in nutrition science point to the quality of dietary fats, i.e. composition in fatty acids, as being more important.

The present study was carried out in Nashik city and it revealed that majority of the ladies did not have enough knowledge or awareness about the nutrients present in food and what forms a balanced diet. It was striking to note that many of them thought that vegetable oils contain cholesterol. Cholesterol is obtained from the diet only through animal sources which includes milk and milk products, meat and meat products. No vegetable oil contains cholesterol. The manufacturers and advertisers take advantage of this lack of awareness of layman.

Poor eating habits and nutrition knowledge deficits may harmfully affect health and increase healthcare costs. Therefore, it is essential to promote an awareness of the nutrients contained in foods in relation to their roles in body maintenance, growth, reproduction, health, and disease prevention in humans.

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