

## **NUTRITIONAL AWARENESS AND FOOD HABITS AMONG SAURASHTRA UNIVERSITY STUDENTS**

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### **Abstract:**

A balanced diet is one that provides the body with all the essential nutrients, vitamins and minerals needed to maintain cells, tissues and organs, as well as to work properly. A diet lacking in nutrients can lead to many different health problems ranging from tiredness and lack of energy to serious problems with function vital organs and lack of growth and development. Carbohydrates, fats and proteins provide energy. Protein is an energy supplier in an emergency but are mainly used as building blocks of growth and the repair of many body tissues. We also need a lot smaller amounts of other nutrients such as vitamins and minerals. Despite the small quantities required, these are essential for ensuring a healthy diet. The aim of the study is to know the awareness of balance diet and eating practices among students.

**Key words: balanced diet, Carbohydrates, fats and proteins, nutrients, meals meal pattern**

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### **1. INTRODUCTION:**

“Health is a dynamic state of complete physical, mental, spiritual and social

Well-being and not just the absence of disease or infirmity.”

(WHO, 1998).

To achieve quality of life, we need healthy people, healthy homes, healthy villages, healthy nations and a healthy world town. The situation reveals that we are still facing the problem of health, on population growth, illiteracy, poverty, inequalities, social isolation, the environment pollution, lack of drinking water, prevalence of contagious and non-communicable diseases, lack of health facilities, services, poor dietary practices production, distribution and consumption system.

Eating habits and physical inactivity contribute to mortality and several common non-communicable diseases. The World Health Organization estimates that 80 percent of cardiovascular disease, 90 percent of type 2 diabetes and 30 percent of all cancers could be

prevented with a healthy diet, adequate amounts of physical activity and by people who don't smoke. According to National Food Administration, July 2005. "Too high energy intake and physical inactivity are also the direct causes of the increasing prevalence of overweight and obesity."

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but are mainly used as building blocks of growth and the repair of many body tissues. We also need a lot smaller amounts of other nutrients such as vitamins and minerals. Despite the small quantities required, these are essential for ensuring a healthy diet. So, the aim of the study is to know the nutritional awareness and food habits among saurashtra university students.

## **2. LITERATURE REVIEW**

- Abelyan, Armen (2012) studied A study to determine the impact of a nutrition course on dietary practices and nutritional concerns among medical college students in Armenia. This study demonstrates that nutrition education appears to be predictive of dietary change. Absence of changes in nutritional concerns of participants suggests a need for further assessment of environmental and behavioural factors implicated in their dietary changes.
- Worsley, A. (2002) studied Nutrition Knowledge and Food Consumption: Can Nutrition Knowledge Change Food Behaviour. Research has shown that nutritional knowledge is only one among many influential factors that influence eating habits. These factors include the perceived consequences of a certain behaviour, beliefs about a certain behaviour, skills that are required, the social and physical

environments of consumer, and most importantly, motivators. Motivators can contribute a very significant amount of influence on food behaviours.

- According to Nutrient Requirements and Recommended Dietary Allowances for Indians, ICMR (1990) Individual between 17 and 20 years of age is called a young students. This period heralds major physical, mental and emotional changes. This is a period of physiological stress for the body because of the extremely rapid rate of growth. The diet plays a crucial role in promoting and sustaining growth.

#### **Recommended Dietary Intakes for youngsters**

<b>Nutrients</b>	<b>Boys (17-19)</b>	<b>Girls (17-19)</b>
Energy (Kcal)	2640	2060
Protein (g)	78	63
Calcium (mg)	500	500
Iron (mg)	50	30
Vitamin A (µg):		
Retinol or	600	600
Carotene	2400	2400
Thiamine (mg)	1.3	1.0
Riboflavin (mg)	1.6	1.2
Niacin (mg)	17	14

Vitamin B, (pg)	0.2 to 1.0	0.2 to 1.0
Vitamin C (mg)	40	40
Folic acid (pg)	100	100

**Source: Nutrient Requirements and Recommended Dietary Allowances for Indians, ICMR (1990)**

### **3. METHODOLOGY:**

#### **3.1 Problem statement:**

- Inadequate nutrition affects students' health and academic success. Students may have proficient knowledge regarding nutritional requirements; however, the transition to college life gives them more freedom to choose the type and the amount of food they eat. Most college campuses have dining facilities that provide a variety of food options, which can lead to establishing either good or bad eating behaviours. College students are at risk for making poor dietary choices that can cause significant health problems. Majority of undergraduate students eat at college dining facilities with limited healthy food options. Moreover, if students do not attain adequate nutrition daily, a decrease in academic or physical performance can result. The purpose of this study is to investigate college students' eating habits and knowledge of nutritional requirements for health.

#### **3.2 Significance of the study:**

It is necessary for college students to take nutritional food and improve their eating habits. Because in this age generally students are deciding their food by their own. So it's necessary that they should choose right food for them.

Nutritional food help to improve academic performance of students. If students know about the nutritional value at early age it's became life time treasure for them. So this study will be conducted to know the knowledge of students regarding nutritional food and their eating habits and give them knowledge regarding nutritional food.

#### **3.3 Objectives of the study:**

To achieve the above mentioned aims, following objectives will be followed:

1. To review the literature about nutritional food required for college students.
2. To Measure the nutritional awareness of respondents.
3. To know the respondents' nutritional, knowledge and food habits.
4. To give suitable suggestions where necessary.

### **3.4 Target Group:**

Study area: The study will be conducted at Saurashtra religion, Gujarat.

Study subjects: The study will be conducted on students between 17-23 years of age, studying at Saurashtra University Gujarat.

Sample size: A total of 120 students will be randomly selected. (Studying in first, second third years in commerce and management department.)

### **3.5 Tools and techniques:**

Data regarding requirement of food intake were collected through materials, journals and websites. Student's knowledge regarding nutritional food and eating habit gathered by questionnaire. Questionnaire is mainly divided into two parts.

I. Nutritional awareness of respondents.

Respondents' nutritional awareness will be assessed by a structured questionnaire:

- Awareness of balanced diet
- Awareness of importance of exercise
- Awareness of different sources of Carbohydrates, fats and proteins.

II. Respondents' nutritional knowledge and food habits

Respondents' nutritional knowledge and food habits will be assessed by a structured questionnaire:

- Number of meals (Meal Pattern)
- Portion of meals
- Eating habits
- Number of times dining out
- Reasons for dining out

The questions in the knowledge questionnaire will be close ended i.e. in multiple choice format. Attitude will be assessed using a Likert scale with responses ranging from strongly agree to strongly disagree on a five point scale.

## **4. ANALYSIS OF DATA**

#### 4.1 Respondents' nutritional knowledge and food habits:

**Table 1: Meal Intake (N=120)**

Statement	Always	Occasionally	Rarely	Never	Mean	SD
Breakfast	67	33	11	9	3.24	0.82
Mid-morning snack	40	50	20	10	3.64	0.96
Lunch/dinner	109	8	2	1	3.73	0.62
Mid-evening snack	27	74	10	9	2.67	0.92
Bed time milk	6	55	31	28	2.13	0.88

Table 1 shows that the majority of respondents indicated that they eat three main meals. The data revealed that respondents always had lunch/dinner, min morning snack and breakfast respectively. Respondents rarely take mid-evening snack and bed time milk. The table also shows that means for having the main meals are 3.7, 3.64 and 3.24 for lunch/dinner, min morning snack and breakfast respectively at the four-point scale. So students does not have knowledge regarding nutritional meals they should take 5 small meals during a day.

#### 4.2 Respondents' nutritional awareness:

**Table 2: Respondents' average per weekly food intake for breakfast (N=120)**

Statement	1-2 times	3-5 times	6-7 times	Mean	SD
Thepla	72	28	23	2.51	1.40
Bhakhari	57	49	14	3.15	1.92
Milk	26	7	87	5.29	2.17
Cereals	87	20	13	1.63	1.13
Oats	99	18	3	1.74	1.23

Pauva	82	31	7	2.60	1.48
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Table 2 shows that the majority of respondents drink milk in breakfast. Once in a while they are taking oats and pauva in breakfast. Again indian healthy breakfast such as pauva, bhakri they take only 2 to 4 times in a week.so generally students do not have knowledge regarding healthy breakfast. They know breakfast is essential but do not know options for healthy breakfast.

Table 3: Respondents' average per weekly food intake for mid-morning (N=120)

Statement	1-2 times	3-5 times	6-7 times	Mean	SD
Fruits	58	39	23	3.14	1.91
Dry fruits	75	35	10	2.14	1.31
Fast food	98	15	7	1.72	1.20
Whole food	56	36	28	3.33	1.91

Table 3 shows that the majority of respondents eat fast food 2 times a week which is not a healthy sign. Again as per healthy diet one should eat fruits 2 times a day. This is a right time for fruits but respondents are taking food only once a week. Generally respondents are not taking mid-morning snack and if they take than not choosing healthy option.

Table 4: Respondents' average per weekly food intake for lunch (N=120)

Statement	1-2 times	3-5 times	6-7 times	Mean	SD
Roti	9	15	96	6.24	1.93
Dal	35	29	56	4.18	2.04
Beans	65	33	22	3.40	2.03
Vegetables	35	33	52	4.15	2.04
Rice	41	35	44	3.78	1.97

Papad	60	29	31	3.20	1.98
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Table 4 shows that the majority of respondents eat roti everyday so carbs requirement can be fulfilled. But respondents are not taking dal and beans everyday so protein requirement cannot be fulfilled. Again respondents are not taking vegetables so they are not getting enough vitamins and fibre. So respondents do not have knowledge regarding healthy options.

Table 5: Respondents' average per weekly food intake for Dinner (N=120)

Statement	1-2 times	3-5 times	6-7 times	Mean	SD
Bhakri	29	42	30	5.33	2.21
Khichadi	54	50	16	3.40	1.97
Pav bhaji	80	16	24	2.54	1.41
Fast food	74	16	30	4.12	2.13

Table 5 shows that the respondents are not eating nutritional food in dinner. Khichadi is a good option but still respondents are taking only 1-2 times a week so dinner generally didn't contain any vitamins and fibre.

## 5. HYPOTHESIS TESTING

**H0: there is no relationship between Independent Variables (Age, Type of family and income) and dependent variable (food intake)**

Table 6: Correlation matrix

Independent variables	Food Intake
Age	0.015
Type of family	
Joint	0.172
Nuclear	0.146
Income	0.140



\* Correlation is significant at the 0.05 level

Data presented in table 6 indicate positive and significant relationship have been observed between the respondent's type of family, age and income in relation to food intake.

**H0: There is no difference between males and females on awareness regarding balanced diet.**

Table 7: ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.249135	0.249135	1.349922	0.252
Residual	44	8.12043	0.184555		
Total	45	8.369565			

Data presented in table 7 indicate that there is no difference between males and females on awareness regarding balanced diet.

## 6. RESULTS AND DISCUSSION:

- 41.3% respondents do not exercise regularly.
- 43.5% respondents drink 7 to 8 glasses of water every day.
- Majority respondents (93.3%) are not taking any medicines.
- 76.1% respondents know about balance diet.
- Only 17.4% of respondents know about frequency of meals. They are taking Breakfast-midmorning snacks-Lunch-Snack- Dinner.
- 26.1 % respondents are going to canteen and restaurant in more than 2 times in week.
- Generally respondents are taking milk as breakfast.
- Majority respondents are taking oats, cereals, thepla and bhakri in their breakfast.
- Generally respondents are taking fast food as their min morning snack.
- Majority respondents are taking carbs (roti) and vegetables and they are totally ignore protein from their lunch.
- Majority respondents are taking carbs in dinner ignoring proteins and vitamins.

- Majority respondents are taking fast food in dinner.
- Only 50% respondents are taking milk at night.
- So majority of respondents know about which food to eat.
- But majority of respondents don't have knowledge regarding nutritional value of food.
- Generally respondents do not know about sources and importance of carbohydrates, protein, vitamin and fibres.
- Majority of respondents are not taking enough proteins and vitamins.
- Majority respondents are not aware about meal pattern generally they feel Meal pattern should be Breakfast-Lunch-Dinner but they should take frequent meals.
- Majority students are taking fast food in mid-morning snack and even in dinner so they do not have knowledge regarding timings. Fast food cannot be taken at dinner.
- Majority students are going out for dinner and min morning snacks which is not good for their health.
- Respondents do not have perfect knowledge regarding balance diet.
- Respondents do not have idea about how to make healthy recipes.
- Majority respondents are doing exercise regularly.
- There is a positive and significant relationship have been observed between the respondent's type of family, age and income in relation to food intake.
  - There is no difference between males and females on awareness regarding balanced diet.

## **7. CONCLUSION:**

- The findings reveal that the majority of students have daily three meals. So they do not have knowledge regarding meal pattern.
- Most of the college students are aware of balanced diet but still fail to attain.so teachers should encourage them to take healthy food.
- Students are eating outside 2 to 3 times/week. Which is not a healthy sign.
- From their food habits it come to conclusion that students are totally ignore protein and vitamins from their diet.

- Students do not have knowledge regarding sources of protein and different vitamins.
- Students are generally taking milk as breakfast they should take healthy Indian breakfast.
- In college there should be separate subject for nutritional awareness.
- College and teachers should encourage students to take healthy food.

## **8. BIBLIOGRAPHY**

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