



**STUDY ON PACKAGE PRODUCT AND NUTRITIONAL FOOD
AWARENESS AMONG COLLEGE GOING GIRLS**

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Abstract:

This study investigated the link between packaged food products and nutritional food awareness among college-going girls aged 18-35. The study collected data from 150 SNTD college-going girls using a survey method. The survey included questions about their consumption patterns of packaged food products, understanding of their nutritional content, and perception of healthy eating habits. Statistical analysis revealed that approximately half of the participants consumed packaged food products regularly, and only a small percentage were nutritionally aware. The study found a negative correlation between consumption of packaged food products and nutritional awareness among college-going girls. The lack of awareness and knowledge about healthy eating habits was a significant contributing factor to the consumption of packaged food products. The findings suggest that nutrition education programs are necessary to increase awareness and knowledge of healthy eating habits among young adults. This study sheds light on the need to promote healthy eating habits and improve nutritional awareness among college-going girls, who are increasingly relying on packaged food products as their dietary staple.

Key words: *Packaged food, nutrition, healthy eating habits, nutritional awareness, pune city.*

Introduction:

This present topic gives a detailed framework of snacks and their eating habits among the youths in general. This study addresses the awareness among college-going girls regarding packaged, nutritional foods and unhealthy eating habits. The research explores the shift in

food habits towards increased consumption of packaged foods and its potential health consequences. Snacking is a popular social activity worldwide, with individuals indulging in a variety of foods and beverages such as fried foods, dried foods, junk foods, and various beverages. The Indian snack industry has emerged as

one of the fastest-growing sectors due to rapid urbanization and a growing population. The pandemic has caused changes in consumer lifestyles, resulting in an increased demand for safe, properly packaged snacks that are both tasty and nutritious. The snacks market in India was worth INR 38,603 Crore in 2022. Snack foods are produced using a variety of raw and auxiliary materials. Common raw materials for snack production include maize, wheat, and rice. This irregular snacking behaviour can pose significant health risks, particularly in children and adolescents, leading to various complications such as cardiovascular, neurological, and metabolic disorders. Several factors are responsible for irregular eating habits, including peer pressure, parental influence, and the increasing trend of Western food consumption.

The term 'packaged food' means simple, fast and convenient food which is easy and quick to prepare besides being hygienic, free from microbial contamination and also convenient to eat. Processed foods are those that have undergone some level of alteration from their original form, ranging from basic actions like cutting, washing, and heating to more complex processing like canning, cooking, freezing, drying, mixing, or packaging. Additionally, processed foods

may contain added preservatives, nutrients, flavours, salts, sugars, or fats. . It is observed that snacking behaviour has been on the increase among adults and teens in recent years. As consumers, snack food products offer a quick and convenient meal on the go or meal substitute vital to sustain busy lifestyles.

Foods that are nutrient-dense contain high levels of essential vitamins, minerals, and nutrients that are vital for good health, while being low in saturated fats, added sugars, and sodium are called nutritional foods. These foods typically include fruits, vegetables, whole grains, low-fat or non-fat dairy products, lean proteins such as fish, seafood, skinless poultry, nuts, and legumes. Nutrients are the substances found in food which drive biological activity, and are essential for the human body .Nutrition plays a great role in our daily life. Better nutrition is related to improved health, stronger immune systems, and lower risk of non-communicable. Hence, awareness of nutritional food among young adults is necessary.

Objectives:

1. To study the awareness of packaged food products and nutritional food product among the college going girls in Pune.

2. To perceive / detect the behaviour and eating habits of packaged and nutritional food products in college going girls.
3. To check the purchasing / buying behaviour of packaged and nutritional food products in college going girls.

Methodology:

The present study collected data through primary and secondary sources. The primary data was collected through a survey tool using a self-designed questionnaire distributed to college girls at SNDT Women's University, Pune Campus. The questionnaire covered socioeconomic, demographic, FFQ (Packaged product, and Nutritional product) 31 questions to ensure it answered the research objectives. The data was collected in the 1st and 2nd week of March 2022 and was validated for facial validity by five academic experts before collection. The secondary data was collected from published and unpublished work from various sources. Samples were selected using the non-probabilistic accidental sampling method, ensuring coverage across all departments and

institutions of SNDT Women's University Pune Campus. Pilot testing was performed for validity and reliability of the questionnaire through facial validity, statistical validity, and Cronbach Alpha test. The results showed that the questionnaire was valid and reliable for further data collection. A total of 150 responses were collected from various age groups and courses to achieve the objectives and test the hypothesis.

Hypothesis:

Null Hypothesis (H_0) = Those who like to eat snacks have been dislike to eat nutritional foods.

Alternate Hypothesis (H_1) = Those who like to eat snacks have been like to eat nutritional foods.

Statistics Used:

The common statistical tests like mean, median, standard deviation was used to find the scores and value of data. Data was analyzed by using SPSS (Version-24.6) for various statistical tests. In order to meet the objectives and test hypotheses, parametric and parametric tests were conducted. For testing the hypothesis Kruskal Wallis And Anova tests are used to analyse descriptive statistics.

Results and Discussion:**Table No.1: Awareness of packaged food products by respondents.**

	Frequency	Percent
Yes	148	98.6
No	2	2.4
Total		100

The results of a survey conducted to assess the level of awareness of packaged food products among a group of respondents. According to the table provided, almost all respondents (98.6%) were aware of packaged food products,

while a very small percentage (2.4%) were not aware.

Overall, this interpretation suggests that the findings of the survey reflect a high level of awareness of packaged food products among the respondents.

Table No.2: Awareness of nutritional product by respondents.

	Frequency	Percent
Yes	139	92.6
No	11	7.3
Total		100

This data indicates that there is a relatively high level of awareness among the respondents about the importance of nutrition in food products. This suggests that people are increasingly conscious

about the nutritional value of the food they consume and are actively seeking out healthier food options. It also implies that there may be a growing demand for healthier food products in the market.

Table No. 3: Reason for preferring snacks.

To fulfill hunger	Frequency	Percent
Always	64	37.6
Frequently	28	16.5
Sometimes	55	32.4
Never	23	13.5
Total	170	100

For a taste	Frequency	Percent
Always	78	45.9
Frequently	35	20.6
Sometimes	45	26.5
Never	12	7.1
Total	170	100
Satisfy	Frequency	Percent
Always	41	24.1
Frequently	39	22.9
Sometimes	57	33.5
Never	33	19.4
Total	170	100
Binge eating while watching movie, series and drama	Frequency	Percent
Always	40	23.5
Frequently	31	18.2
Sometimes	59	34.7
Never	40	23.5
Total	170	100

Based on the survey responses, college-going girls prioritize taste and convenience over nutritional value when choosing packaged and nutritional food products. A significant proportion of respondents (45.9%) reported consuming these products primarily for their taste, indicating that taste plays a crucial role in their food choices. Additionally, a large number of respondents (37.6%) mentioned consuming these products to fulfill their hunger always, suggesting that convenience and accessibility are

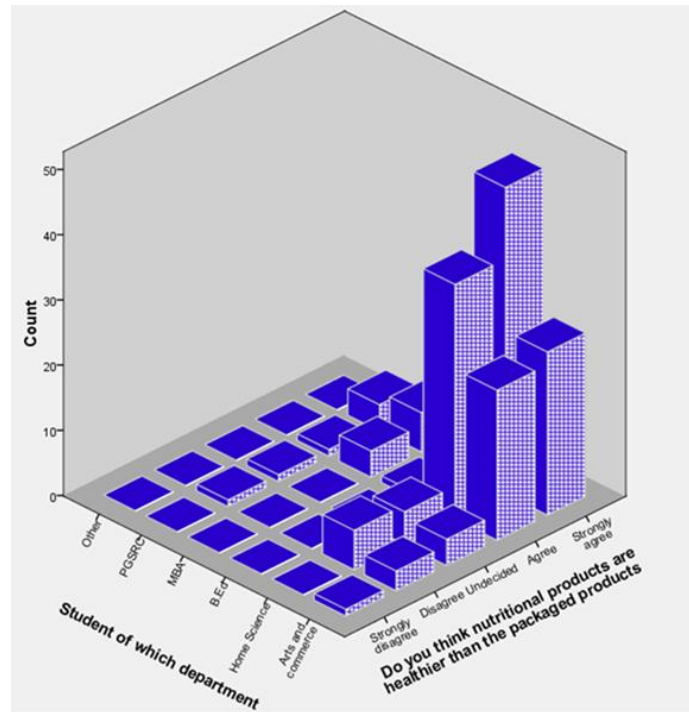
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important factors in their decision-making process. The survey also revealed that binge eating while watching movies, series, and dramas is common among college-going girls, with 34.7% reporting engaging in this behavior sometimes. This behavior can lead to excessive calorie intake and have negative health consequences. Notably, only 33.5% of respondents reported considering nutritional needs sometimes when consuming these products, indicating that nutritional value is not a top priority for

most college-going girls. In summary, taste, convenience, and entertainment seem to outweigh nutritional

considerations in the food choices of college-going girls.

Diagram No. 1: Consumption Nutritional products to be healthier than packaged products



From the above diagram, it is evident that students at Arts and Commerce College and Home Science College believe nutritional products to be healthier than packaged products. Several students in home science colleges refuse to

perceive nutritional products packets as healthier. Those differences may further reflect the levels of attitudes due to the courses of faculties, which may contribute to diverging them towards packaged foods.

Table No 4: Like to buy because

Like to buy because	Frequency	Percent
Low cost	82	54.7
Looks Beautiful	24	16
Looks Attractive	43	28.7
Like to buy because of Nutritional content	28	18.7
Like to buy because Low fat	18	12
Long shelf life	49	32.7

In summary, the table shows that cost is the top priority for college-going girls when buying packaged and nutritional food products, followed by long shelf life and visual appeal. This implies

that they are looking for affordable and practical options that can last longer. The preference for attractive packaging suggests the influence of advertising on their purchasing decisions.

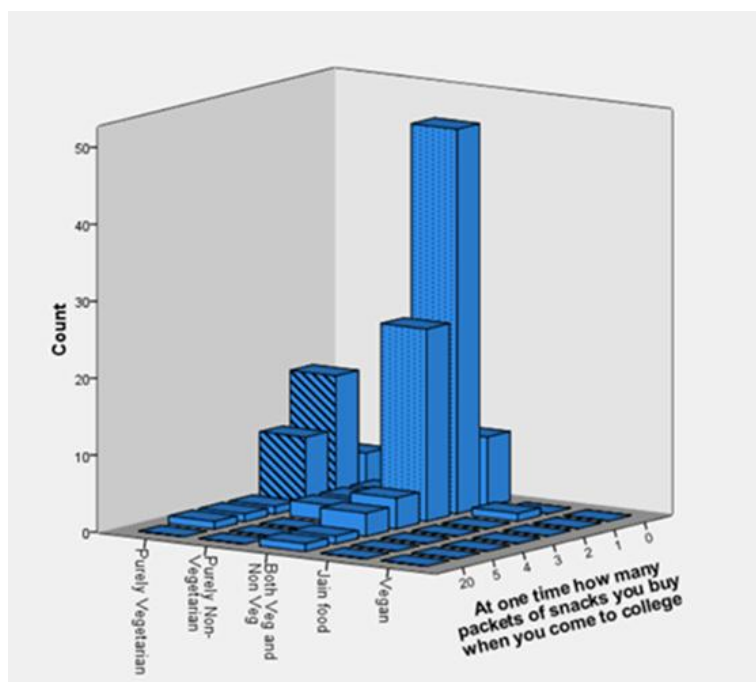
Table No.5: At one time how many packets of snacks you buy when you come to college

	Frequency	Percent
0	14	8.2
1	69	40.6
2	36	21.2
3	7	4.1
4	4	2.4
5	2	1.2
20	1	0.6
Total	133	78.2

The survey results indicate that a significant percentage of the respondents rely on packaged and nutritional food products as their diet while coming to college. This suggests a preference for

convenient and portable snack options that can be easily consumed on the go. The findings reflect a growing trend of using packaged food products as a dietary staple among college-going individuals.

Diagram 2: Consumption of Number of packet snacks while coming to college.



Based on the above diagram, it is evident that both vegetarians and non-vegetarians at SNDT Women University of Pune usually take up to four packets of snacks to college. It is also surprising to see that vegetarian college girls take more snack packets than non-vegetarian girls

when they are going to college. It is also amazing to see that some of the girls take more than five snack packets whenever they go to college, regardless of their diet pattern, i.e. vegetarian and non-vegetarian.

Hypothesis:

Table No.6: Descriptive Statistics of say not snacking with nutritional product are healthier than the packaged product

	N	Mean	Std. Deviation	Minimum	Maximum
Would you say No to snacking because - It has high saturated fats	170	2.27	0.855	1	5
Would you say No to snacking because - It has rich with oil	170	3.02	1.219	1	5
Would you say No to snacking because - It has rich with salt	170	3.03	1.148	1	5
Would you say No to snacking because - It has rich with spice	170	3.15	1.118	1	5
Do you think nutritional products are healthier than the packaged products	170	1.70	0.869	1	5

Table No.7: Kruskal Wallis Test Statistics^{a,b}

	Would you say No to snacking because - It has high saturated fats	Would you say No to snacking because - It has rich with oil	Would you say No to snacking because - It has rich with salt	Would you say No to snacking because - It has rich with spice
Chi-Square	16.135	4.270	4.304	10.828
df	4	4	4	4
Asymp. Sig.	0.003	0.371	0.366	0.029

a. Kruskal Wallis Test

b. Grouping Variable: Do you think nutritional products are healthier than the packaged products

From the above table it shows that Kruskal Wallis test value $H=16.135$ of two variable at the significance level $p=0.003$ of high saturated fat with nutritional products are healthier than the packaged products. The assumed significance level ($\alpha=0.05$) is greater than calculated values i.e. $p=0.009$. Whereas value of $H=10.828$ for the responses based on the refuses to take snacks while it is rich with spices with the nutritional products are healthier than the packaged products. Here, both the cases significance level i.e. $p > \alpha$. On contrary to this packaged products which is rich with oil the nutritional products are healthier than the packaged products Kruskal Wallis test value $H=4.270$ where calculated value of significance $p=0.371$ is greater than assumed significance $\alpha=0.05$. Furthermore Kruskal Wallis value of rich with fat $H=4.304$ with the nutritional products are healthier than the packaged

product significance level $p=0.366 > \alpha=0.05$.

In above circumstances for the snacks have more saturated fat and rich with spice have responded along with the nutritional products are healthier than the packaged products have significantly associated whereas for the snacks rich with oil and salt haven't any such significance between nutritional products are healthier than the packaged products.

Henceforth,

Null Hypothesis (H_0)= Those who like to eat snacks have been dislike to eat nutritional foods is rejected with 0.05 level of significance.

Whereas

Alternate Hypothesis (H_1)= Those who like to eat snacks have been like to eat nutritional foods approved/retained with 0.05 level of significance.

Conclusion:

In conclusion, the convenience and availability of packaged food products have contributed to an increase in their consumption, particularly among college students who may not have the time or resources to prepare their own meals. However, these products may contain high levels of calories, unhealthy fats, and added sugars that can contribute to weight gain and other negative health effects. The survey results show that respondents are highly aware of packaged and nutritional food products, indicating an increasing interest in health and wellness among the population.

It is essential to promote healthy snacking habits among college students, raise awareness about the negative health effects of consuming salty, fatty, or spicy snacks, and encourage the consumption of nutrient-dense, whole foods over processed, packaged foods. In addition, there is a need to promote the consumption of certain food items among college-going girls, such as maize flour, cheese, and dark green vegetables, and to educate consumers about the benefits of a balanced diet.

Overall, the survey provides valuable insight into the purchasing and buying behavior of college-going girls regarding packaged and nutritional food products. With factors such as cost, shelf

life, and attractive packaging influencing their decision-making, there is a growing need for convenient, portable snack options that fit into busy schedules. By promoting healthy food choices and emotional eating habits, we can improve the overall health and wellbeing of college students and the wider population.

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