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Perceptions and Practices of Food Habits among Secondary School Students in Lakhimpur-Kheri District of Uttar Pradesh

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ABSTRACT:
The present study analyses the perceptions and behavioural practices related to food habits of students studying in secondary schools of Lakhimpur-Kheri district of Uttar Pradesh. Eating habits developed during adolescence affect physical, mental and social health. In this research, questionnaires have been used to collect data from secondary school students of private and government schools. This research evaluated students' food preferences, junk food consumption, nutritional knowledge, and their attitudes toward healthy eating. Research results showed that many children understand the importance of food well, but in reality, unbalanced diet and junk food consumption was found to be very high among children. Gender, socio-economic status and family environment were found to have a significant influence on eating habits. This study suggests that school-based nutrition education and awareness programs can develop healthy eating habits among students. We are making a small attempt to conduct such a study in Lakhimpur Kheri district. Our study included 60 students, of whom 30 were boys (50.0%) and 30 were girls (50.0%). Data was collected using a questionnaire. The aim of this study is to determine the level of awareness among secondary school students regarding food habits and junk food.

Keywords: Food Habits, Nutrition, Health Behaviour, Secondary School Students

INTRODUCTION

Students at the secondary school are in a phase of adolescence where physical, mental and social development takes place at a rapid pace. (Kapur, S. (2015). Food habits adopted at this stage not only influence current health but also lay the foundation for future lifestyle behaviours. Students' perceptions of food—such as their understanding of healthy eating, their attraction to junk food, and their choice of traditional and modern food options—directly influence their daily dietary behaviours. Due to changing lifestyle, media influence and availability, the trend of unbalanced eating is increasing among teenagers today, which can lead to malnutrition, obesity and other health problems (Atik, D., 2013).

In this context, it is crucial to study the perceptions and practices related to food habits of secondary school students to understand their nutritional status and develop appropriate educational and health-based interventions. This study will prove helpful in revealing the actual situation of food behaviour of students at the regional level (Calvert, S 2020).

REVIEW OF LITERATURE

Calvert, S *et al.* (2020) conduct study on**" A qualitative study investigating food choices and perceived psychosocial influences on eating behaviours in secondary school students"** came to the conclusion that obesity in children is a serious worldwide health issue. Reducing the detrimental health effects of obesity requires an understanding of children's and adolescents' eating habits and encouraging healthy practices. The present study investigated how 11–13-year-old secondary school students perceived healthy eating habits and the factors that influence them.

Camus, K. (2024) this study focused on **"Food Habits and Preferences of Senior High School Students of Zone II, Division of Zambales".** In this research 361 randomly selected students participated in unstructured interviews as part of a descriptive research methodology, which included a questionnaire as the primary instrument. The study examined the students' food choices for breakfast, lunch, and snacks. The majority of the Grade 12 respondents were Roman Catholic girls from low-income households, whose parents had only recently completed high school and who received very little daily allowance. The students reported eating regular meals, usually at home, and preferred fried dishes. There were significant differences in the students' food preferences for breakfast, lunch, and snacks. The study recommended providing affordable and nutritious food in school canteens, promoting balanced home-cooked meals, encouraging healthy cooking practices, and conducting further research in other schools.

Kang, H. J (2004) conduct study on **"A study on the food habits and dietary intakes of university students in Busan area".** This study investigated the eating habits and dietary patterns of university students in the Busan area. It utilized self-administered questionnaires completed by 130 male and 156 female students. The results showed high rates of alcohol consumption and breakfast skipping in both genders, with men reporting higher rates of smoking and faster eating habits, while women reported less regular exercise and greater concern about body image, often desiring a thinner figure. Men primarily controlled their weight through exercise, while women used both exercise and fasting. Female students had a lower average BMI, and a higher proportion were underweight. Snack preferences and the frequency of eating out differed between genders, and food choices were largely based on taste rather than nutritional value. Overall energy intake was below recommended levels, and deficiencies in calcium and certain vitamins were observed in both male and female students.

Choi *et al*. (2008) studied "**A study on nutrition knowledge and dietary behaviour of elementary school children in Seoul."** In order to gather more information regarding the eating habits and nutrition knowledge of 475 elementary school kids in Seoul, South Korea, ages 9 to 12, this study employed a self-administered questionnaire. The children comprehended food varieties and nutrients better than food safety and hygiene, and they had a fair understanding of nutrition, according to the findings. Despite this, they had a tendency to eat badly, consuming large amounts of fast food, sugary snacks, and sugary drinks and little in the way of fruits, vegetables, and dairy. Good eating habits were positively associated with higher nutrition knowledge, while poor food choices were linked to lower nutrition knowledge.

Lange *et al.* (2016) conducted a study on **"Self-reported food safety knowledge and behavior among Home and Consumer Studies students"** in Sweden, where the poll was completed by 110 students. We looked at home and consumer studies students' self-reported knowledge of food safety as well as their behaviour. The findings demonstrated that the students had a solid understanding of food safety procedures, including how to prevent cross-contamination and store food at the right temperature. They did not, however, always act in accordance with their expertise of food safety. For instance, a few students said they didn't always wash their hands before handling food.

STATEMENT OF THE PROBLEM

OBJECTIVES

- To find out the level of knowledge regarding the food habits of secondary school students.
- To study the difference in the basic knowledge regarding the food habits of secondary school students by demographics.

HYPOTHESIS

There is no significant difference in the basic knowledge regarding the food habits of secondary school students for demographics, i.e.

- Gender
- Age
- Class
- Board

RESEARCH DESIGN OF THE STUDY

The present study was a descriptive survey. A simple random sampling technique was incorporated.

POPULATION

The population for the present study was secondary school students from Lakhimpur-Kheri Uttar Pradesh.

SAMPLE

The sample was purposefully selected for the current study, which examines the viability of data collection and trials. 60 secondary school students were randomly selected to form the study sample. The districts of Lakhimpur and Kheri in Uttar Pradesh were included in the sample.

TOOLS FOR DATA COLLECTION

The researcher developed a self-designed questionnaire based on the Food Habits for Secondary School Students. The rating scale has two components. Demographic factors, including class, age, gender, and school board, are covered in the first section. The second section deals with secondary school pupils' awareness of food habits.

VALIDATION OF THE TOOL

After the finalization of the items, the tool was sent for Expert Validation. With the suggestions and remarks of the experts, Content Validity Ratio (CVR) for the tool was calculated. This study uses Content Validity Ratio (CVR) proposed by Lawshe (1975) to identify valid items.

Only 8 experts were selected to express opinion on Appropriateness of the identified 27 items to assess the knowledge and practice of food habits. They were asked to rate the items in a two - point scale (1= Essential, 2= Not Essential). The validation was conducted offline and the tool was used to collect data and experts were also given a transitory about background of the research. CVR was calculated as described by Lawshe (1975) to assess the content validity.

Final Draft: A total of 10 experts out of 8 responded and their suggestions were found to be comprehensive. On the basis of data (showed as Final Draft), CVR was calculated to be 0.95, which was much greater than the critical value of 0.750 for 8 experts (Table 1).

Table 1: Stage-wise Items and CVR value (Essential)

Sl No.	Items	CVR
1	Where does the body get the energy to keep it healthy?	1
2	The milk, cheese and curd all are essential for-	1
3	What kind of food should we have in case of illness?	1
4	Your body needs vitamins and minerals because-	1
5	What are the benefits of eating sesame on an empty stomach in the morning?	0.667
6	What is the best source of getting vitamin D to maintain our health?	1
7	Do you think eating fast foods or street foods are harmful for health?	1
8	How many litters of water should the human body consume in its entire day?	1
9	Is drinking tea and coffee regularly bad for your health?	1
10	Which protein provides good health and nutritious food?	1
11	Should you include protein, iron, fibre, calcium, carbohydrate vitamins in your diet?	1
12	How do you come to know about food safety?	1
13	Which of the following factors are necessary for a healthy person?	1
14	Is it essential for us to keep cleanliness at the place of eating?	1
15	Before you eat, do you clean the plate?	0.889
16	What kind of salt your family uses?	1
17	Which one of the following is an unhealthy habit?	1
18	What is the main cause of malnutrition (kuposan) in children?	1
19	**Is taking canned food harmful to health?**	**0.333***
20	Have you ever noticed that your mother cleans vegetables, rice, pulses, etc., before cooking?	1
21	What to eat if Vitamin A is deficient in the body?	1
22	Which drink is good for health?	1
23	What are the benefits of eating beetroot for good health?	1
24	Is eating pulses good for our health?	1
25	Does consumption of Meat in a regular basis good for your health?	1
26	Does daily eating chocolates and colored cakes good for your health?	1
27	Do you know that regular consumption of milk helps in making bones and muscles strong?	1
	Average CVR value	**0.9588**

Note-* Item deleted due to low CVR

CVR average value for all the items was calculated and 1 item (19) was deleted due to low CVR value. A final valid tool with 26 items was finalized for the final survey.

DATA ANALYSIS

1. *Significance of Students' knowledge of the food habits with respect to Gender:*

Gender	N	Mean	S.D.	t	df	p-value	Reference
Male	151	2.812	.3438	-2.377	297	.018	Significant
Female	148	2.896	.2584				

The table presents the comparison of students' knowledge of food habits with respect to gender. The mean score of female students (M = 2.896, SD = 0.2584) is slightly higher than that of male students (M = 2.812, SD = 0.3438), indicating that female students possess comparatively better knowledge of food habits. The calculated *t* value (t = −2.377) with 297 degrees of freedom is statistically significant at the 0.05 level (p = .018). This result indicates a significant difference between male and female students in their knowledge of food habits. Therefore, the null hypothesis stating that there is no significant difference in students' knowledge of food habits with respect to gender is rejected, and it can be concluded that gender has a significant influence on students' knowledge of food habits.

2. *Significance of Students' knowledge of the food habits with respect to Board:*

Board	N	Mean	S.D.	t	df	p-value	Reference
UP Board	146	2.814	.3173	-.725	298	.469	Not Significant
CBSE	154	2.867	.2971				

The table shows the comparison of students' knowledge of food habits with respect to the board of education. The mean score of CBSE students (M = 2.867, SD = 0.2971) is slightly higher than that of UP Board students (M = 2.814, SD = 0.3173). However, the obtained t value (t = −0.725) with 298 degrees of freedom is not statistically significant at the 0.05 level (p = .469). This indicates that the observed difference in mean scores is due to chance and not meaningful. Therefore, the null hypothesis stating that there is no significant difference in students' knowledge of food habits with respect to the board of education is accepted. It can be concluded that the board of education does not have a significant influence on students' knowledge of food habits.

3. *Significance of Students' knowledge of the food habits with respect to Class:*

Class	Sum of Squares	df	Mean Square	F	Sig.	Reference
Between Groups	.220	2	.110	1.171	.311	Not Significant
Within Groups	27.941	297	.094			

The table presents the results of one-way ANOVA examining the significance of students' knowledge of food habits with respect to class. The analysis shows that the calculated *F* value is 1.171 with degrees of freedom (2, 297), and the obtained significance value is .311, which is greater than the 0.05 level. This indicates that there is no statistically significant difference in students' knowledge of food habits across different classes. Therefore, the null hypothesis stating that there is no significant difference in students' knowledge of food habits with respect to class is accepted. It can be concluded that class level does not have a significant influence on students' knowledge of food habits.

4. *Significance of Students' knowledge of the food habits with respect to Age:*

Age	Sum of Squares	df	Mean Square	F	Sig.	Reference
Between Groups	.243	2	.121	1.292	.276	Not Significant
Within Groups	27.918	297	.094			

The table shows the results of one-way ANOVA examining the significance of students' knowledge of food habits with respect to age. The obtained *F* value is 1.292 with degrees of freedom (2, 297), and the significance value is .276, which is greater than the 0.05 level. This indicates that there is no statistically significant difference in students' knowledge of food habits among different age groups. Therefore, the null hypothesis stating that there is no significant difference in students' knowledge of food habits with respect to age is accepted. It can be concluded that age does not have a significant influence on students' knowledge of food habits.

FINDINGS

1. Gender-wise Difference in Knowledge of Food Habits

The study highlights a statistically significant difference in students' knowledge of food habits with respect to gender. Female students demonstrated significantly higher knowledge of food habits than male students. This finding suggests that gender plays an important role in shaping awareness and understanding of healthy food practices. Many studies have constantly shown that girls have a habit of to have better nutritional knowledge and healthier dietary awareness than boys, possibly due to greater socialization towards health and caregiving roles (Wardle et al., 2004; Contento, 2011).

2. Board-wise Comparison of Knowledge of Food Habits

No significant difference was found in students' knowledge of food habits with respect to the board of education (UP Board and CBSE). Although CBSE students showed a marginally higher mean score, the difference was not statistically significant. This indicates that the curriculum and schooling system across different boards provide relatively similar exposure to food and health-related knowledge, supporting earlier findings that formal board affiliation alone does not strongly influence students' health knowledge (Rani & Sathiyaseelan, 2019).

3. Class-wise Comparison of Knowledge of Food Habits

The results showed no significant difference in students' knowledge of food habits across different class levels. This suggests that progression in class does not necessarily lead to a proportional increase in knowledge related to food habits. The finding highlights that health and nutrition education may not be systematically or progressively reinforced across grade levels, a concern also noted by earlier studies in school health education (WHO, 2017).

4. Age-wise Comparison of Knowledge of Food Habits

Similarly, no significant difference was observed in students' knowledge of food habits with respect to age. This indicates that age does not significantly influence students' understanding of food habits. This finding aligns with previous research suggesting that without targeted interventions, nutritional knowledge does not automatically improve with age during adolescence (Story et al., 2002).

CONCLUSION

The present study examined students' knowledge of food habits with respect to gender, board of education, class, and age. The findings indicate that gender is the only variable that shows a significant influence on students' knowledge of food habits, with female students demonstrating better knowledge than male students. This highlights the presence of gender-based differences in health and nutrition awareness among students.

In contrast, no significant differences were found with respect to the board of education, class, or age. The absence of significant variation across boards suggests that students receive similar exposure to food and nutrition-related information regardless of the educational board. Likewise, there are no significant differences across class and age groups, indicating that students' knowledge of food habits does not increase automatically with academic progression or age. Overall, the results suggest that students' knowledge of food habits remains relatively uniform across institutional and developmental factors, except for gender. This highlights the need for systematic, structured, and inclusive nutrition education programs in schools that address gender differences and strengthen food habit awareness across all age groups and class levels. Such initiatives may contribute to the development of healthier dietary practices and long-term well-being among students.

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