



Effect on school-going adolescents' knowledge, attitudes, and practices about healthy lifestyles in public and private schools

¹Sakshi and ²Dr. Ritu

¹Research Scholar, Department of Home Science, Monad University, Kastala Kasmabad, Uttar Pradesh, India

²Professor, Department of Home Science, Monad University, Kastala Kasmabad, Uttar Pradesh, India

Corresponding Author: Sakshi

Abstract

Adolescent health is intricately linked to nutrition, encompassing the regular consumption of a nutritious diet, crucial for disease prevention and human development. Nutrition education, spanning individual, community, and policy levels, aims to facilitate healthy eating behaviors. Meal patterns influence body composition and overall health, with socioeconomic factors shaping food habits and preferences. Encouraging fruit and vegetable intake while reducing junk food consumption is paramount. Parents play a pivotal role in instilling healthy habits early on, with schools serving as crucial platforms for nutrition education. Research indicates positive impacts of such programs on students' attitudes and behaviors. The rise of junk food culture, marked by its convenience and appeal among youth, underscores the need for interventions.

Keywords: Nutrition, fat, sodium, television, advertisement, food consumption

1. Introduction

Adolescent health is greatly impacted by nutrition. It is described as a word associated with the regular needs of eating a nutritious diet. The public uses it for planning, preparation, and research. Both the prevention of disease and human development are significantly impacted by nutrition. It is crucial for maintaining optimum health and the body's normal operation. It is characterized by a complex's, multi-system process of transitioning from childhood immaturity and social dependency to adulthood with the expectation of realizing one's own potential for growth, social responsibility, and personal agency. Any combination of educational techniques combined with environmental supports is known as nutrition education, and its goal is to make it easier for people to voluntarily adopt healthy eating habits and other nutrition-related behaviors that are beneficial to their overall health and wellbeing. Understanding nutrition is a crucial component of being health conscious. Knowledge about nutrition encompasses a wide range of issues, some of which include taste, convenience, affordability, food security, and cultural views. The best surveys to use as a baseline for evaluating intervention programs are KAP (knowledge, attitudes, and practices) surveys. Meal patterns have an impact on body fat, bone density, and a host of other factors. Nutrient intake, diets quality are defined by meal patterns. Moreover, the main components of meal habits are fast food

consumption, diet adoption, snacking, and missing meals. Individuals differ in their food habits and preferences due to a variety of socioeconomic circumstances. Fruit and vegetable consumption should rise while junk food and fatty food consumption should decline overall. In the early years of their life, parents can prevent their children from acquiring sedentary tendencies by creating regular routine activities for them. A balanced diet is essential for optimum development, lifestyle, and health. Malnourishment, stunted development, and nutrition-related issues can all be avoided with good eating habits. Prior studies have shown that educational institutions such as schools serve as a foundation for children to develop healthy eating habits. Education about nutrition has a critical role in raising children's academic achievement. Children can thus benefit from having excellent health in the future if they eat a balanced diet and engage in physical activity (PA). Additionally, a number of research on the efficacy of nutrition education programs were carried out between 2013 and 2019, and the results indicated that nutrition education positively impacted students' attitudes and behaviors related to nutrition. The primary cause of children's poor food habits and nutrient-related deficits is their contemporary, urban lifestyle. It is advised that youngsters participate in a physical activity-based nutrition education program to encourage good eating and lifestyle choices. In this case, one of the most potent persuasive elements for improving a

person's knowledge, attitude, and behavioral performances is education. Many nutritional issues affect school-age children because parents and other caregivers lack understanding about healthy eating and physical activity habits. To further combat the malnutrition linked to nutrition in children, physical exercise and nutrition education are essential.

1.1 Junk food

Healthy, nutritious foods are increasingly being overshadowed by the pervasive allure of JUNK FOOD! This category comprises items low in nutritional value, lacking essential nutrients such as vitamins, minerals, amino acids, and fiber. Defined by their high calorie content devoid of micronutrients, junk food has become a staple in contemporary diets.

Fast food, readily available and requiring minimal preparation, epitomizes this trend. Its popularity among youth is fueled by factors including accessibility, palatability, affordability, aggressive marketing strategies, and peer influence. This phenomenon is particularly evident in India, where the proliferation of fast food culture poses significant challenges to the health and wellbeing of children. Efforts to counteract this trend are underway, aiming to mitigate its adverse effects on dietary habits and overall health.

The phrases junk and fast food are frequently used interchangeably. However, their preparation method makes them junk food or quick food. Fast foods are cooked and delivered quickly, whether junk food is quick, tasty, convenient, or fashionable. These foods appeal to people of all ages and races, with children being the most recent additions. Street meals and quick cuisine are also considered junk.

2. Objectives of the study

1. Assess the nutritional health of school-aged children who consume junk food often.
2. Evaluate the health status of school-aged children who regularly consume junk food.

3. Materials and Methods

3.1 Research design

A research design comprises the framework, strategy, and plan of an inquiry devised to address a particular research question and maintain variability under control.

All the independent variables utilized in this investigation are "attribute" variables, which means they are all outside

the control of the researcher. They are resistant to investigator manipulation. The current investigation is therefore considered "ex-post facto."

In this research, the independent variables of gender, socioeconomic status, and junk food consumption were varied at two levels each, and at three levels together, in order to examine the main and interaction effects of these variables on the dependent variable of children's nutrition and health. Consequently, this research design was utilized to validate the correlation between children's nutrition and health and the aforementioned three independent variables or factors.

4. Results

4.1 Socio-demographic characterization

Table 1: This data provides insights into various demographic factors such as gender, geographical area, income levels, residential status, father's occupation, age distribution, and body mass index among the surveyed students

Sr. No.	Demographics	Frequency	Percentage
1.	Student's Gender		
	Female	216	100
2.	Geographical Area		
	Urban	108	50
	Peri-Urban	108	50
3.	Monthly Income		
	Less than 10,000	84	38.9
	10,000-200000	114	52.8
	Above 200000	18	10.2
4.	Residential Status		
	Own house	168	77.8
	Rented house	48	22.2
5.	Father's Occupation		
	Businessman	52	24.1
	Office job	34	15.7
	Laborer	62	28.7
	Professionals	8	3.7
	Others	60	27.8
6.	Age		
	11 years	6	2.8
	12 years	8	3.7
	13 years	40	18.5
	14 years	66	30.6
	15 years	96	44.4
7.	Body Mass Index		
	Underweight	84	38.9
	Normal	110	50.9
	Overweight	22	10.2

Table 2: Frequency distribution of pre-and post-testing

Sr. No.	Questions	Pre-Testing			Post-Testing		
		Always	Sometimes	Never	Always	Sometimes	Never
1.	Do you go for a walk after eating a meal?	34 (15.7%)	104 (48.1%)	78 (36.1%)	96 (44.4%)	106 (49.1%)	14 (6.5%)
2.	Do you like sports?	48 (22.2%)	104 (48.1%)	64 (29.6%)	154 (71.3%)	52 (24.1%)	10 (4.6%)
3.	Do you eat fruits and vegetables?	6 (2.8%)	86 (39.8%)	124 (57.4%)	176 (81.5%)	40 (18.5%)	0 (0%)
4.	Do you wash your hands before eating?	4 (1.9%)	52 (24.1%)	160 (74.0%)	202 (93.5%)	14 (6.5%)	0 (0%)
5.	Do you brush your teeth before going to bed?	26 (12%)	94 (43.5%)	96 (44.4%)	150 (69.4%)	64 (29.6%)	2 (0.9%)
6.	Do you engage in any physical activity?	26 (12.0%)	108 (50.0%)	82 (38.0%)	52 (24.1%)	152 (70.4%)	12 (5.6%)
7.	Do you eat junk food late at night?	42 (19.4%)	140 (64.8%)	34 (15.7%)	2 (0.9%)	56 (25.9%)	158 (73.1%)
8.	Do you drink carbonated beverages late at night?	35 (17.6%)	118(54.6%)	60 (27.8%)	2 (0.9%)	76 (35.2%)	108 (63.9%)
9.	Do you drink milk?	30 (13.9%)	98 (45.3%)	88 (40.7%)	128 (59.3%)	78 (36.1%)	10 (4.6%)

4.3 Paired sample t-test

The study's findings demonstrated a substantial correlation

($p=0.001$) between schoolchildren's pre-and post-knowledge, attitudes, and actions.

Table 3: Comparison of pre and post knowledge, attitudes and practices

Paired Sample t-Test						
Sr. No.	Variables	N	Mean	Standard Deviation	t	p-value
1.	Knowledge					
	Pre-Knowledge	216	7.8144	1.88027	-34.187	0.001
	Post Knowledge	216	14.00	.00000		
2.	Attitude					
	Pre-Attitude	216	8.2132	2.21737	-6.305	0.001
	Post Attitude	216	9.7405	1.31394		
3.	Practice					
	Pre-Practice	216	55.8887	5.59927	-13.869	0.001

Independent Sample t-Test: The findings showed a significant correlation between private school pupils' pre- ($p=0.024$) and post- ($p=0.001$) understanding of government. Pre- ($p=0.001$) and post- ($p=0.005$) sentiments

of government and private school pupils were significantly correlated. Last but not least, Table 4 showed a strong correlation between the before ($p=0.170$) and post ($p=0.001$) habits of pupils in private schools and government.

Table 4: Comparison between government and private schools through independent sample test.

Independent Sample t-Test						
Sr. No.	Variables	N	Mean	Standard Deviation	t	p-value
1.	Knowledge					
	Pre-Knowledge Govt. School	108	8.2224	1.28365	2.293	0.024
	Pre-Knowledge Private School	108	7.4078	2.26974		
	Post Knowledge Govt. School	108	14.0000	.00000	2.045	0.001
Post Knowledge Private School	108	14.0000	.00000			
2.	Attitude					
	Pre-Attitude Govt. School	108	9.0187	1.79615	4.033	0.001
	Pre-Attitude Private School	108	7.4078	2.31903		
	Post Attitude Govt. School	108	10.0923	1.52055	2.873	0.005
Post Attitude Private School	108	9.3887	.95987			
3.	Practice					
	Pre-Practice Govt. School	108	55.1483	5.32844	-1.383	0.170
	Pre-Practice Private School	108	56.6293	5.81245		
	Post Practice Govt. School	108	46.2595	3.25744	-4.35	0.001
Post Practice Private School	108	49.3887	4.15468			

5. Conclusion

In conclusion, teenagers who attend school have bad lifestyle choices and incorrect eating habits mostly due to ignorance. Following nutrition education sessions, school-age female adolescents' eating patterns, physical activity, nutritional habits, meal times, and meal skipping all improved and had a favorable influence on their lifestyle. Nutrition education was significantly correlated with knowledge, attitudes, and behaviors related to physical activity, personal cleanliness, sleep patterns, and screen time among female adolescents enrolled in both public and private schools. Thus, the nutrition education of female adolescents enrolled in school was positively impacted by these lifestyle changes.

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