



INTERNATIONAL JOURNAL OF TRENDS IN EMERGING RESEARCH AND DEVELOPMENT

INTERNATIONAL JOURNAL OF TRENDS IN EMERGING RESEARCH AND DEVELOPMENT

Volume 2; Issue 1; 2024; Page No. 45-49

Received: 07-12-2023

Accepted: 18-02-2024

To study hygiene habits nutritional and health related fitness among school going children of Delhi

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

Knowledge of ideas and procedures pertaining to nutrition and health is referred to as nutrition knowledge. It covers information on foods that are important sources of nutrients, diet and illness, and dietary guidelines and recommendations. It is crucial for increasing consciousness and, eventually, the general well-being of society.

Sustaining life requires sufficient food. Food is frequently used in conjunction with the phrase "nutrition." Food's biological significance is determined by the nutrients it contains. Gaining information about nutrition is necessary to implement better eating habits. It is important to recognize the impact that increasing one's knowledge about nutrition can have on one's health and eating choices.

Healthy eating choices may therefore demonstrate a child's well-being and capacity to study and play normally, as malnutrition has an impact on both of these areas. Childhood eating habits have a direct impact on the development, growth, and prevalence of disease throughout the life cycle. Thus, it is important to establish healthy eating habits early childhood. When kids get older and into puberty, their diets typically get worse. Adolescents typically do not prioritize healthy eating, and as a result, unhealthy eating habits increase the risk of both present and future health issues.

Keywords: Knowledge, nutrition, food, well-being, health issues

1. Introduction

These days, a country's ability to maintain its health is crucial to its development. An diseased culture can never rise to tremendous heights or transform a country. Therefore, a strong educational system and a healthy society are essential for a country's success. A country cannot ignore its health, education, and physical education systems if it is to prosper and meet the challenges of the future millennium. In addition to being morally, ethically, and humanitarily right, investing in health is also economically necessary. A maximally dependent and incapacitating state to a maximally independent and contented life is on a spectrum of health. The word "health" has its etymological roots in the English word "whole," which denotes a condition of well-integrated holistic existence. To rely on one's own self of joyful condition is the equivalent expression in Sanskrit, 'SWASTHYA'.

The definition of health according to the World Health Organization is "A state of complete physical, mental,

social, and spiritual well-being and not merely an absence of disease and infirmity." A person's physical, mental, emotional, and spiritual well-being are all components of their overall health.

The various Indian states and territories are in charge of providing healthcare. The Constitution states that each state's principal responsibility is to improve the public health of its citizens by raising the standard of living and nutrition of its citizens. The Indian Parliament approved the National Health Policy in 1983 and revised it in 2002.

The World Health Organization estimates that breathing in dirty air and consuming tainted water cause 900,000 deaths among Indians annually. As India struggles with these fundamental problems, new problems are beginning to surface. For instance, as a result of changing lifestyles, chronic adult diseases like diabetes and cardiovascular ailments are becoming more common. Significant variations exist in the health status of individuals even within the states of the nation, which are primarily related to how state

governments distribute resources, with certain states achieving greater success than others. The local governments must work harder to make sure that the poor in the areas most affected by the health services are receiving them. One special time in the life cycle to intervene is during adolescence. It is the point at when a child's physical and developmental transition from a child to an adult begins. During this process and time, some of life's most complicated transitions take place. Adolescent changes in biology, society, psychology, and cognition can have a big impact on one's nutritional status. The need for nutrition and energy increases due to the rapid physical growth.

In India, the history of healthcare dates back almost three millennia. The Aryurvedic medical tradition has been practiced since ancient times in India. Schools of learning in the medical arts were established in the third century BCE, under the reign of Emperor Asoka Maury. Numerous useful herbs and herbal concoctions were developed. Many of these are still in use today. Evidence from his reign suggests that Emperor Asoka was the first ruler in history to try providing healthcare for all of his subjects; as a result, ancient India was the first state to provide national health care for its people.

1.1 Nutrition

Malnutrition is a key contributing factor to child mortality in several countries, including India, where there is a severe case of child malnutrition. For many years, researchers and policy officials have been interested in this issue. To determine the underlying causes of child malnutrition, numerous surveys and research have been carried out. Malnutrition is a complex issue with multiple causes, including poverty, purchasing power, health care, ignorance of nutrition and health education, female illiteracy, social convention, and others. All of these studies, including the three National Family Health Surveys (NFHS), demonstrate this.

Malnutrition decreases intellectual performance, memory, and hearing. Children's physical and mental development depends on receiving an optimal diet. Iodine supplementation, whether in the form of iodized salt or iodized oil, improves the mental performance of school-age children who are deficient in iodine. Children's ability to think is influenced by diet, according to a study on the effects of zinc, iodine, iron, and foliate deficiencies on school-aged children's cognitive development. For instance, low iron and zinc levels have been linked to compromised cognitive functioning, delayed growth and development, lowered immunity, and heightened susceptibility to infectious infections. The school-age years are a dynamic time of physical growth and development during which children experience mental, emotional, and social transformations, according to World Health. Schoolchildren's health differs not only from location to location but also between urban, rural, and tribal locations. Around one-fifth of the population in India is made up of school-age children, who make up 25% of the global population.

Schoolchildren are undernourished and eat an inadequate diet. For a variety of causes, including poverty, ignorance, and mental instability brought on by institutional maladjustment, schoolchildren often miss meals, leading to

malnourishment. During the school age period, malnutrition can affect physical growth, functioning of the body, and academic achievement. Children's dietary and health conditions can have a negative impact on their learning, leading to subpar performance, as well as their physical fitness.

Three important aspects of the global agenda are education, health, and good nutrition. However, none of these three elements by themselves will be sufficient to bring about social and economic development; rather, only their combination will make it possible to get closer to a society free from hunger and poverty. Improving schoolchildren's, families', and the community's overall nutrition knowledge, attitudes, and practices (KAP) is greatly aided by nutrition education. It is crucial to remember that there are other sources of nutrition knowledge outside nutrition education, even if it is a crucial starting point for teaching nutrition. Additional entrance points include the school setting, school lunches, health and nutrition groups, and school gardens, to name a few. Furthermore, the community and family are crucial in helping people learn about nutrition and develop nutrition-related behaviors. Conversely, one of the primary social arenas where lifestyles are formed is the school. It provides a supportive atmosphere for the students to develop the indigenous nutrition knowledge, attitudes, and practices that they have absorbed from their families and communities.

One important environmental factor influencing both physical and mental development is nutrition. Research demonstrates that eating a healthy diet improves children's overall health and potential for learning, which in turn improves academic performance. Children and teenagers who develop good eating habits, are urged to exercise, abstain from smoking, and acquire stress management techniques may experience a decrease in the effects of chronic illnesses as adults. Food habits are complicated by nature, and their formation is influenced by a variety of conditioning factors.

The school age years lay the groundwork for mental and physical well-being. It is therefore a fundamental turning point in a person's life and the cause of many changes that occur later in life. Children who do not grow to their full potential during this critical time may never catch up, even with a healthy diet. Research has demonstrated that children who had experienced malnutrition in the past performed noticeably worse than children who had not experienced it. Having a healthy diet throughout childhood is crucial because undernourishment in the early years of life reduces adult body size and physical output during periods of rapid growth. Negative effects that manifest in adulthood are caused by a high degree of nutritional deprivation and a significant disease burden at a young age. As a result, children are regarded as the unique risk group and the school age period is important in terms of nutrition. During this time, malnutrition has a negative impact on physical development, working capacity, and academic achievement.

1.2 Rationale of the study

After reading the literature listed in the study's first chapter, the researcher came to the conclusion that schoolchildren should be taught about nutrition, hygiene, and health-related fitness. This is because children who lack knowledge about

these topics face a variety of challenges in their daily lives as a result of environmental and personal constraints that impede their ability to grow and develop normally and increase their risk of developing secondary conditions.

The results of a plethora of recent studies and clinical reports suggest that youngsters who lack information are frequently more vulnerable to secondary disorders that negatively impact their quality of life. Progressive muscle weakness, chronic illnesses, infectious diseases, malnourishment, poor dental health, appetite loss, constipation, mood swings, low self-esteem, perceived control, poor social relationships, lack of social support, negative societal attitudes, etc. are the secondary issues that are most frequently reported. More significantly, it is the ideal moment to establish the fundamental framework for a healthy country and way of life. Thus, the research scholar took the initiative to start the current research project.

2. Objectives of the study

The following goals were set for this investigation.

1. To ascertain the current level of awareness among Delhi's school-age children regarding dietary habits, health-related fitness, and cleanliness practices.
2. To determine how male and female Delhi school-going youngsters differ from one another in terms of their understanding of dietary and fitness-related health and hygiene practices.

3. Materials and Methods

The data for the present study was collected through the administration of the Questionnaire for the selected variables on the selected school going children from all over Delhi. In Delhi, both public and private schools participated in this poll. A total of 200 students were chosen at random. A total of 200 pupils between the ages of 10 and 15 were

chosen from Delhi eight schools. In the children's mother tongue, a pre-structured questionnaire with fifteen items was created and given out. The purpose of this questionnaire was to gauge respondents' attitudes and levels of knowledge regarding the consumption of junk food and nutrition. The knowledge test schedule that was employed during the pre-exposure phase was once more employed to determine the effect of nutrition education on the level of knowledge and everyday habits pertaining to nutrition and eating habits of school-age children. The respondents chose a "Yes" or "No" response in response to statements. A post-test that was completed by the respondents and a comparison of their pre- and post-test results determined the effect of the nutritional awareness that was raised among the target groups using communication materials.

4. Results and data interpretation

Table 1: Distributions of respondents on the basis of dietary habit

Dietary Habit	N = Frequency	Percentage (%)
Vegetarian	102	51%
Eggitarian	23	11.5%
Non-vegetarian	75	37.5%

The distribution of school-age children's food patterns was displayed in Table 1. It was clear that the majority of respondents (51%) fell into the vegetarian group, meaning they do not include eggs or animal products in their normal meal patterns and only drink milk and follow a vegetarian diet. 37.5 percent of respondents said they were not vegetarians; these students eat meat and poultry items and incorporate vegetarian milk in their meal plans. It was found that 11.5% of all youngsters had a vegetarian diet, meaning they did not eat any animal products and instead consumed eggs and vegetarian foods.

Table 2: Distribution of opinion of respondents about different aspects of fast foods and street foods

Sr. No	Statement	Yes		No	
		N	%	N	%
1	Do you know what is fast foods and street foods?	192	96.3	8	3.8
2	Do you enjoy eating fast foods and street foods?	170	85.3	30	14.8
3	Has the fast foods and street foods become a basic need for you.	18	8.8	182	91.3
4	Do you think fast foods and street foods are unhealthy?	163	81.5	37	18.5
5	Do you think it is more damaging than beneficial to the society?	142	71.0	58	29.0
6	Consumption of fast foods and street foods with your friends and family is a form of entertainment for you.	154	77.3	45	22.8
7	Do you think Hi-tech life is more responsible for habit of consuming fast food in school going children?	132	65.8	68	34.3
8	Advertisements mould your mind in such a way that you are forced to consume certain type of fast foods and street foods.	128	64.3	71	35.8
9	Urbanization has a greater influence on changing food habits of urban children.	133	66.3	67	33.8
10	Would you like to prefer branded fast foods	160	80.3	40	19.8

The survey results on respondents' preference for fast food for enjoyment are displayed in Table 2. The data indicated that while 3.8 percent of youngsters were unaware of the existence of fast food and street food, the majority of respondents (96.3%) were aware of these concepts. While 14.8 percent of respondents agreed that fast food and street food had become a basic need for them, 91.3 percent of children disagreed and 85.3 percent of children said they enjoyed eating these foods. Additionally, school-age children reported that they were satisfied when they ate these foods and that they used to eat them for fun and

enjoyment. When it came to respondents' opinions, it was discovered that 81.5 percent agreed with the assertion that fast food and street food products are unhealthy, while 18.5 percent disagreed. Regarding the respondents' opinions, it was discovered that the majority of youngsters (71.0%) agreed with the statement that fast food and street food are more harmful than useful to society, while the remaining respondents (29.0%) disagreed. In response to the question of whether eating fast food with friends and family is a kind of enjoyment for them, the majority of the youngsters (77.3%) in the sample that was chosen agreed with this

statement, while 22.8 percent of respondents disagreed. While 34.3 percent of youngsters believe that the choice of fast food is not influenced by high technology, the majority of students (65.8%) believe that high tech life is more to blame for the habit of consuming fast food and street food. Regarding the question of whether commercials influence people's decisions to eat particular fast food varieties, the majority of respondents (64.3%) agreed with the statement, while 35.8% disagreed. The majority of respondents (66.39%) agreed with the statement that urbanization has a stronger impact on modifying dietary habits of urban pupils, while 33.8 percent of the youngsters disagreed. While 19.8% of school-age children do not favor branded fast food, 80.3 percent of youngsters always buy it. This finding is corroborated by research presented by Vaida (2013), which suggested that when asked if commercials influence people's decisions to eat particular kinds of fast food, most respondents had different opinions, though some held similar viewpoints.

Table 3: Assessments of knowledge level of the respondents at pre and post intervention of nutrition education.

Awareness level	Knowledge percentage			
	Pre-exposure (n=400)		Post-exposure (n=400)	
	N	%	N	%
Fair (< 7)	120	60.25	16	8.0
Good (8-11)	53	26.5	147	73.75
Excellent (>11)	27	13.25	36	18.25

$\chi^2 = 252.25$ *Significant
 $P = <0.00001$ * (At 5% probability level)

Table 3 displays the respondents' degree of knowledge on a variety of topics related to eating behaviors, dietary habits, and balanced diets. After the data were statistically interpreted, it was found that there was a substantial ($p < 0.00001$) correlation between the respondents' pre-intervention scores and post-intervention scores. This outcome showed that providing the nutrition intervention through prepared nutrition education materials resulted in a good improvement in the knowledge level of the chosen respondents. It is an efficient technique for raising school-age children's knowledge levels.

School-age students may benefit from nutrition education on school grounds by learning about the potential long-term health consequences of consuming large amounts of fast food and high calorie intake. In order to inform the public about healthy eating practices, several media campaigns and other communication techniques are employed in various nations. Yes, those campaigns and programs can have a big impact on knowledge, attitudes, awareness, and the will to change, but they often don't have an impact on behavioral changes. Children should be taught healthy eating habits and living habits via media, newspapers, and efficient teaching strategies in school campaigns. Foods abundant in nutrients, such as cereals, legumes, fruits, vegetables, milk, and milk products, should be promoted to children.

Following an educational intervention, there has been a noticeable improvement in students' overall knowledge. Therefore, it is advised to replicate this kind of program among teenagers in order to enhance attitudes, knowledge, and dietary habits related to healthy eating.

5. Conclusion

The development of traits that frequently ward against illness and are linked to physical exercise is the focus of health-related physical fitness. Physical educators should emphasize the importance of health-related physical fitness to all individuals. Numerous universities, businesses, and other organizations have launched programs for their students and clients as a result of skyrocketing health care expenditures and the recognition of the advantages of engaging in physical activity. They have discovered that these initiatives not only support optimal health but also make financial sense because ill health has a negative impact on development productivity, absenteeism, and illness.

Any application and hygienic measure done to protect ourselves from environments that can harm our health is considered hygiene. Personal hygiene is the term for self-care practices that people use to keep their health in check. Hygiene issues include these practices. In addition to being essential for the prevention of many diseases, especially infectious diseases, good personal hygiene is also critical for safeguarding and preserving health and treating health issues. Hand-face hygiene, frequent bathing, cleaning with soap and running water, washing hands before preparing food, before and after eating meals, and after using the restroom, taking care of one's hair, and washing and wearing one's own clothes, towels, shoes, and slippers are examples of personal hygiene precautions. Hygiene is an essential component of social life and serves as a foundation for both individual and societal health. Pollutants from the outside world have an ongoing effect on humans. Many environmental contamination sources can be encountered during daily activities; these can be touched with the hand, found on shoes when walking, or included in dust on the body or hair. Additionally, microbes can enter the body when the hand is moved to the mouth.

One of the most important characteristics of a civilized society is hygiene. For the benefit of a country as well as an individual or family, sanitation and health go hand in hand. Health is the foundation of all happiness, according to James Leigh Hunt. The cornerstone of a healthy, moral, fruitful, and meaningful existence is good hygiene. The adage "prevention is better than cure" is timeless. Maintaining proper hygiene builds a strong defense against illness. Along with a healthy diet, regular exercise, and immunity building, good hygiene plays a major role in prevention. Family members may have varying levels of immunity due to various factors, such as age and work, but one thing that benefits them all is good hygiene. The only thing that can enable a family to remain outside during an epidemic is maintaining adequate cleanliness.

6. References

1. Arabatzi F. Physical Activity, Physical Fitness and Overweight in Early Schoolchildren. *Journal of Sports Medicine and Doping Studies*. 2016;4(2):234-238.
2. Arora G. Nutritional Awareness and Status of Adolescent Girls Studying in Schools of Urban and Rural Areas of District Kurukshetra. *Journal of Food and Nutrition Sciences*. 2015;3(3):126-130.
3. Ashok N. A comparative study of nutritional status between government and private primary school

- children of Mysore city. *International Journal of Health and Allied Sciences*. 2014;3(3):164-169.
4. Assefa M. Assessment of factors influencing hygiene behaviour among school children in Mereb-Leke District, Northern Ethiopia: A cross-sectional study. *BMC Public Health*. 2014;14(1):1000.
 5. Atli M. Assessment of obesity awareness stage of secondary school students. *SHS Web of Conferences*. 2015;31(4):28-32.
 6. Bello AR. Nutritional Awareness and Food Habits among King Saud University Students. *Kasmera*. 2015;45(2):23-27.
 7. Bhardwaj A. A Community based cross sectional study on use of sanitary latrines in a rural setup in Maharashtra. *Healthline*. 2013;4(1):89-93.
 8. Blom LC. Associations between Health-Related Physical Fitness, Academic Achievement and Selected Academic Behaviors of Elementary and Middle School Students in the State of Mississippi. *Journal of Research*. 2001;6(1):12-18.
 9. Carlson S. Trend and prevalence estimates based on the 2008 Physical Activity Guidelines for Americans. *American Journal of Preventive Medicine*. 2010;39(4):305-313.
 10. Chaudhari A. A study on personal hygiene of school going and non-school going children in Ahmadabad district, Gujarat. *National Journal of Community Medicine*. 2015;6(2):437-441.
 11. Chesire E. Determinants of under nutrition among school age children in a Nairobi peri-urban slum. *East African Journal of Medicine*. 2008;85(10):471-479.
 12. Choi FS. A study on nutrition knowledge and dietary behavior of elementary school children in Seoul. *Nutritional Research and Practices*. 2008;2(4):308-316.
 13. Dale D. Physical activity participation of high school graduates following exposure to conceptual or traditional physical education. *Research Quarterly for Exercise and Sports*. 2000;71(1):61-68.
 14. Deb S. Relationship of personal hygiene with nutrition and morbidity profile: A study among primary school children in South Kolkata. *Indian Journal of Community Medicine*. 2010;35(2):280-284.
 15. Dongre A. An approach to hygiene education among rural Indian school going children. *Online Journal of Allied Health Science*. 2007;4(2):212-218.
 16. Dutt S. Health Related Physical Fitness of Boys Aged 8 to 18 Years. *Journal of Exercise Science and Physiotherapy*. 2005;1(1):12-22.
 17. Eboh L. Nutrition Knowledge and Food Choices in Primary School Pupils in Niger – Delta Region Nigeria. *Pakistan Journal of Nutrition*. 2006;5(1):308-311.
 18. Ekeland E. Exercise to improve self-esteem in children and young people. *Cochrane Library*. 2009;3(1):1-39.
 19. Engle P. Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world. *Lancet*. 2007;34(2):229-242.
 20. Ferkel RC. Relationship between Health-related Fitness Knowledge and Physical Fitness. *International Journal of Physical Education, Sports and Health*. 2015;6(1):76-82.
 21. Foster C. Athletic performance in relation to training load. *Wisdon Journal of Medicine*. 1996;95(6):370-374.
 22. Ghosh S. Nutritional problems in urban Slum Children. *Indian Pediatrics*. 2004;41(4):682-689.
 23. Girois S. A comparison of knowledge and attitudes about diet and health among 35- to 75-year-old adults in the United States and Geneva, Switzerland. *Ameatur Journal of Public Health*. 2001;91(1):418-424.

Creative Commons (CC) License

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY 4.0) license. This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.