



Dietary Habits And Awareness On Nutrition Among The School Children Of Jeypore Town Of Odisha

Mrs Sruti sanchayeeta Tripathy, Dr Harapriya Samantaray,

Research scholar Pg department of Home Science

Berhampur University, Odisha, India.

ABSTRACT-

Growth serves as the primary global indicator of children's well-being, and adequate food intake is crucial for proper growth. Nutrition plays a significant role during the growth phase. According to estimates from WHO and UNICEF, malnutrition impacts the physical and mental functions of 2 billion children. The aim of the present study was to examine the awareness of nutrition and food habits among school-going children in Jeypore town. The study utilized a cross-sectional descriptive survey design. Data was collected from 250 school children using purposive sampling. Clinical signs were noted during data collection to evaluate nutritional deficiency diseases. The means and t-test were applied for data analysis. The results indicated that the parents of the children were knowledgeable about the nutritive value of food. Nutritional deficiency disorders were identified based on clinical signs. It was determined that the children exhibited poor eating habits. Commonly, the children either skipped breakfast, purchased snacks or junk food, ate between meals, or consumed soft drinks daily. There were no significant differences between boys and girls regarding their mean responses to food nutritive value or the eating habits they adopted. Promoting good eating habits and providing nutritional counselling to both parents and school children will not only enhance their nutritional well-being but also help them overcome current nutritional deficiency diseases.

Keywords –Awareness, nutritional status, school going children, food habits, nutritional counselling.

INTRODUCTION

Nutritional intake is a crucial factor that significantly impacts human health and well-being, particularly during childhood and adolescence, where its importance is even more pronounced. The direct influence of nutritional intake on children's health is critical due to their ongoing physical and mental development, as well as cognitive growth. Additionally, it has lasting effects on overall health by shaping lifelong eating habits in children. Patterns of food consumption and obesity are linked to various immediate health issues and serious long-term consequences, such as cardiovascular diseases, diabetes, hypertension, stroke, cancer, dental issues, asthma, and certain psychological disorders like depression. Consequently, the quality of diets among children and adolescents has emerged as a significant concern for researchers. Over

recent decades, substantial efforts have been made to address dietary changes and the types of foods consumed, leading to a shift from fast food to healthier traditional meals. Nevertheless, the majority of children fail to adhere to the recommended dietary guidelines and lack healthy eating habits. Moreover, dietary quality tends to worsen as children age, characterized by a decrease in the consumption of fruits, vegetables, and milk, alongside an increase in the intake of soft drinks.

Nutrition education is clearly required for the establishment of desirable dietary lifestyles in school age children, and the purpose of nutrition education is not to convey simple nutrition knowledge but to actually apply nutrition knowledge to everyday life to maintain more reasonable dietary lifestyle. Contento (1990) reported that increased knowledge and behavioural changes in general were not matched and, on the contrary, no behavioural change for choosing healthy meals was observed, suggesting that nutrition education should focus on behavioural changes, not on knowledge increase. Only the supply of knowledge is not sufficient to change multi-dimensional behaviors such as dietary behaviour. Elementary school children are sensitive by nature and thus this period is effective for educating basic knowledge including nutrition knowledge on general dietary lifestyle, food selection, dietary habits, and table manners with organized educational contents. Dietary habits are more difficult to change as the age of children increases and thus it is important to provide nutrition education to eat various foods with balance and with moderate amounts by correcting one-sided dietary habits in the school age children (Lee & Pang, 1996).

In recent years, various health organizations have initiated interventions aimed at encouraging healthy eating behaviors among the youth; however, these efforts have yielded limited success, potentially due to a lack of understanding regarding dietary habits and the need for age-appropriate interventions. As noted by Shepherd et al. in their research, the impact of dietary influences varies with age, and not all interventions are effective across different age groups. Despite this, there has been relatively little research focused on the nutritional knowledge, practices, and attitudes of the Iranian youth, as well as the differences observed between various age groups and genders in numerous aspects of this domain.

Proper and adequate nutrition is a crucial component of a healthy lifestyle. Consequently, it is vital to foster an understanding of the nutrients present in foods concerning their significance for body maintenance, growth, reproduction, health, and disease prevention in humans. Suitable nutrition is essential for numerous reasons, including optimal cardiovascular function, muscle strength, respiratory ventilation, protection against infections, wound healing, and psychological well-being. Furthermore, it aids in the prevention of nutrition-related diseases through a diet that includes the appropriate amounts of food constituents such as carbohydrates, fats, proteins, vitamins, minerals, and water, which are necessary for body building, energy supply, and regulatory functions. According to the World Health Organization (WHO), nutrition is a fundamental aspect of health and development. Improved nutrition is associated with enhanced physical and mental health in infants, a stronger immune system, safer pregnancies and childbirth, and a reduced risk of non-communicable diseases and longevity.

The dietary consumption and eating patterns of individual school-aged children in Jeypore town seem to exhibit low levels of protein, vitamins, and minerals, as well as insufficient fiber. This nutritional intake appears to be a contributing factor to the rising incidence of malnutrition, which is

a significant risk factor for low body weight, slow growth rates, and various nutrition-related diseases.

OBJECTIVE-

- To study about the awareness on nutrition among the school going children of Jeypore town.
- To assess about the dietary habit of school going children of jeypore town.

Review of literature

"Children consume the same food as their family members. The attitudes of parents significantly shape their children's perspectives on health. Furthermore, children are not instructed on how to effectively implement their understanding of nutrition." - Local paediatrician

In a literature review encompassing studies from various countries, it was determined that the nutritional status of school-aged children, particularly those in Southeast Asia and Africa, was insufficient.

As the frequency of family meals declines and the number of children eating alone or preparing their own meals rises due to socioeconomic changes, studies have indicated that the quality of meals is inferior when children eat alone compared to when they eat with family. Additionally, the incidence of meal skipping increases among children who eat alone, and their ability to establish proper dietary habits is hindered by solitary eating (Adachi 1998; Adachi et al., 2000).

School-aged children often lack adequate knowledge regarding their health and nutrition, and they do not recognize the significance of maintaining good health. Consequently, they tend to choose foods based solely on preference, which exacerbates dietary imbalances (Chung et al., 2004).

These poor dietary practices lead to an increased intake of caloric nutrients, thereby raising the risk of overweight, obesity, and juvenile diabetes. Conversely, certain essential nutrients such as calcium, vitamin A, thiamine, and riboflavin may be lacking due to unbalanced diets, frequent dining out, and the prevalence of processed foods, resulting in a state of nutritional imbalance characterized by both over-nutrition and nutrient deficiencies (Jung, 2002).

Vijayapushpam et al. conducted a research study involving school children in Hyderabad, revealing that there was an increased consumption of fast foods and carbonated drinks among the children, regardless of their socioeconomic status (SES) in the study. Similarly, a qualitative study carried out on school children in India indicated that students from the Indian middle socioeconomic status were already somewhat aware of the health advantages associated with nutritious food consumption and physical activity; however, it was noted that parents, educational institutions, and the media could play a role in promoting unhealthy behaviors.

Joseph N et al., in their research focused on male school children in Mangalore, discovered that 64.3% of the participants were first exposed to fast foods via television. The study also identified parental fast food consumption as a significant factor influencing children's fast food intake, and it was observed that a higher frequency of fast food consumption within a week was linked to overweight or obesity in children.

METHODOLOGY-

This research, which included students from the std 1 to std 12th grades at a school in , jeypore of koraput district of Odisha was carried out in January 2023. Six focus group discussions were held with 250 students, and the data collected was corroborated through key informant interviews and a review of relevant literature. Key themes regarding knowledge and behaviour. This study adopted a cross sectional descriptive survey design. This study was carried out in local private school of Jeypore town. The study participant were 250 school going children purposelessly selected for the study.

The survey questionnaire was composed of 15 question items on general environment of the subjects, 10 items on nutrition knowledge, 10 items on nutrition attitude, and 12 items on dietary habits.

1) General characteristics

The height and body weight of the participants were recorded from physical examination records collected at the start of the semester through physical assessments, after which the obesity index of the participants was determined. Additionally, factors such as the educational level of the parents, the employment status of the mother, the type of residence, wake-up time and bedtime, family size, and monthly household income were also taken into account.

2) Nutrition Knowledge

Question items assessing nutrition knowledge consisted of a total of 10 items, which included the functions of 5 major nutrients (5 items), food sources (2 items), and general nutrition knowledge (3 items). This was based on the survey questionnaire developed by researchers from previous studies. Responses were categorized as either 'yes', 'no', or 'don't know', with each question item assigned a value of 1 point, resulting in a maximum score of 10 points. Higher scores indicated greater nutrition knowledge among subjects. Recognized knowledge was calculated as the ratio of the number of question items answered 'yes' or 'no' to the total number of items, while the rate of correct answers was determined by the ratio of correct responses to all items.

4) Dietary Habit

The dietary behavior questionnaire consisted of 12 items, which were developed by modifying and enhancing questions from the studies conducted by Lee et al. (1980) and Choi & Jung (2006). These studies assessed the balance of food intake over the course of a week. Participants were instructed to indicate the number of relevant days in a week for each question item, categorizing their responses as 0-2 days, 3-5 days, or 6-7 days. Points were assigned to each question, with 1, 2, and 3 points corresponding to the respective categories.

A total of six Focus Group Discussions were held. Each FGD included between 8 to 12 students. The study involved 250 students from grades 1 to 12. The discussions were organized according to the students' grade levels and gender. Consequently, three FGDs were composed solely of male students, while the remaining three were exclusively female. The students' awareness and perceptions of nutrition were evaluated separately for both male and female participants. Variations in health perceptions and behaviors across different grades were also documented. During each FGD, students were arranged in a circle, with the principal investigator serving as the moderator. Each discussion continued until an information saturation point was achieved. All sessions were recorded using an audio recorder and subsequently transcribed with great care.

RESULT DISCUSSION-

Table no 1- Distribution of participants regarding nutritional awareness-

NUTRITIONAL AWARENESS	FREQUENCY	PERCENTAGE
AWARE	95	38%
UNAWARE	155	62%

Above table presented the awareness level of the 250 participants in which 38% of participants were aware about the nutritional knowledge and 62% of participants were unaware about the nutrition of foods.

**Table 2 shows the students of different classes of the study participant**

Participants of different classes	N	%	Boys	Girls
Std 1	35	14	15(13.89)	20(14.08)
Std2	35	14	17(15.74)	18(12.68)
Std3	40	16	18(16.67)	22(15.49)
Std4	50	20	20(18.52)	30(21.13)
Std5	50	20	20(20.37)	28(19.72)
Std6	40	16	16(14.81)	24(16.90)

Table no 2 illustrated about the percentile of boys and girls. Out of 250 school children of different classes 43.20% of students are boys and 56.80% of students are girls. So the result was the percentage of girls was more than boys.

Table-3: Mean responses and t-test analysis of awareness of food nutritive value of boys and girls

SL.NO.	Nutritive value of food	M1	SD1	M2	SD2	M1	Awareness	Significance	Dec.
1	Carbohydrate provide energy to the body	3.93	1.00	3.98	0.94	3.96	EA	0.92	NS
2	Carbohydrates raise blood sugar level	3.67	0.86	3.66	0.85	3.67	EA	0.83	NS
3	Glucose helps in production of insulin	3.48	0.95	3.49	0.99	3.49	MA	0.66	NS
4	Protein helps in building of tissues and muscles	3.62	0.92	3.64	0.93	3.63	EA	0.52	NS
5	Fat and oil are source of energy	3.92	0.89	3.93	0.88	3.92	EA	0.31	NS
6	Vitamin and mineral are protective food	3.61	0.91	3.63	0.98	3.62	EA	0.46	NS
7	Vitamin c prevents scurvy	3.57	0.82	3.56	0.82	3.57	EA	0.20	NS
8	Vitamin D is usefull in maintenance of calcium	3.11	0.89	3.09	0.90	3.10	MA	0.94	NS
9	Calcium is usefull in maintenance of bones and teeth	3.73	0.77	3.75	0.75	3.74	EA	0.15	NS
10	Milk and milk product are important for bone and teeth	3.64	0.87	3.63	0.98	3.63	EA	0.71	NS
11	Water removes waste products from the body	3.65	0.93	3.66	0.85	3.66	EA	0.35	NS
12	Water maintains homeostasis in the body	3.21	0.91	3.23	0.91	3.22	MA	0.27	NS
13	Water helps to transport nutrients	3.37	0.95	3.35	0.79	3.36	MA	0.74	NS
14	Energy is stored in the	3.41	0.96	3.39	0.79	3.40	MA	0.35	NS

	form of body fat								
--	------------------	--	--	--	--	--	--	--	--

Dec=Decision, EA=extremely aware, M1=mean and boys, M2=mean of girls, MA=moderately aware, M1=total means, NS=not significant, SD1=standard deviation of boys, SD2=standard deviation of girls, Degrees of freedom=246; P=0.05.

Furthermore, the findings presented in Table-3 indicate that there are no significant differences in the awareness of nutritive value between school children of different sexes; as the t-test values ranged from 0.15 to 0.92 at 246 degrees of freedom, exceeding the predetermined significance level of 0.05. This implies that both male and female school children in the studied region possess an equal understanding of the nutritive value of the foods they consume, regardless of their gender.

Table-4 : Mean responses and to t-test analysis of eating practices of boys and girls

SL.NO.	Eating practices of the children	M1	SD1	M2	SD2	M1	Adoption	significance	Dec
1	Skipping of breakfast	3.30	0.99	3.33	0.67	3.32	MA	0.21	NS
2	Not having lunch	3.70	1.03	3.80	1.11	2.61	SA	0.47	NS
3	Having breakfast at home	2.83	1.05	3.10	1.12	1.76	DNA	0.38	NS
4	Having breakfast at school	3.56	1.14	3.70	1.18	3.40	MA	0.40	NS
5	Carrying of breakfast from home	3.61	1.16	3.66	1.10	3.21	MA	0.45	NS
6	Buying food	2.98	1.15	3.44	1.21	3.62	EA	0.46	NS
7	Having food from fast food centers	3.25	1.16	3.56	1.09	2.89	SA	0.33	NS
8	Eating in between meals	3.80	1.06	3.90	1.12	3.26	MA	0.55	NS
9	Having balanced meals	3.20	0.99	3.18	1.04	3.20	MA	0.49	NS
10	Having snacks as their lunch	2.59	1.09	2.57	1.11	2.59	SA	0.37	NS
11	Having	3.14	1.03	3.20	1.01	3.16	MA	0.43	NS

	dinner at 8 pm								
12	Eating dinner at 6 pm	2.93	1.12	2.70	0,91	1.35	SA	0.52	NS
13	Having Breakfast and lunch from food	2.20	1.1	2.43	1.11	2.70	SA	0.41	NS

Moreover, the findings presented in Table-4 indicate that there are no notable differences in the eating habits of boys and girls, as the values for all + tess varied between 0.21 and 0.55 with 246 degrees of freedom, exceeding the established significance level of 0.05. This implies that both boys and girls in the studied region exhibit comparable eating practices, regardless of their gender.

RESULT & DISCUSSION :

This research aimed to explore the awareness of the nutritional value of food and eating habits among school-aged children in Jeypore Town. Initially, the results from the study suggest that the school children had a limited awareness of the nutritional value of food. Additionally, the findings regarding eating habits indicate that common practices included skipping breakfast and lunch, consuming breakfast while at school, and purchasing food from fast food establishments. No significant differences were observed in the eating habits of boys and girls. Consequently, the gender of the respondents did not have a significant impact on their views regarding the eating practices they typically engaged in. Therefore, nutritional information charts could be created and displayed on school walls to enhance awareness of the nutritional value of food and their personal eating habits.

CONCLUSION-

The dietary habits developed in childhood tend to carry over into adulthood, establishing the foundation for either good health or poor health in later years. Therefore, it is essential to inform parents, particularly those in middle and upper socioeconomic classes, about appropriate dietary practices for their children to guarantee that they can lead healthy and productive lives as adults.

The current research indicates that children attending school in Jeypore Town possess knowledge regarding the nutritional value of various foods. Nevertheless, it is essential for these children to enhance their implementation of healthy eating practices, as good eating habits will not only contribute to their nutritional health but also aid in the prevention of nutrition-related illnesses.

To support this, the food guide pyramid, accompanied by appropriate graphics and images, should be prominently displayed on school walls, with the objective of ensuring that children have access to adequate nutrition during their lunch.

REFERENCE-

1. World Health Organization (WHO) and United Nations Children's Fund (UNICEF) (2009) WHO Child Growth Standards and the Identification of Severe Acute Malnutrition in Infants and Children. Department of Child and Adolescent Health and Development, World Health Organization Press, Geneva.
2. Blossner, M., Siyam, A., Borghi, E. and Onyango, A. (2010) WHO AnthroPlus Software. WHO, Department of Nutrition for Health and Development, Geneva. http://www.who.int/childgrowth/software/anthro_pc_manual.pdf
3. Bose, K., Bisai, S., Chakraborty, J., Dutta, N. and Banerjee, P. (2008) Extreme Levels of Underweight and Stunting among Pre-Adolescent Children of Low Socioeconomic Class from Madhyamgram and Barasat, West Bengal, India. Collegium Antropologicum, 32, 73-77.
4. Fetuga, M.B., Ogunlesi, T.A., Adekanmbi, A.F. and Alabi, A.D. (2011) Growth Pattern of Schoolchildren in Sagamu, Nigeria Using the CDC Standards and WHO Standards 2007. Indian Pediatrics, 48, 523-528.
5. Chowdhury, S.D., Chakraborty, T. and Ghosh, T. (2008) Prevalence of Undernutrition in Santal Children of Puruliya District, West Bengal. Indian Pediatrics, 45, 43-46.
6. Goon, D.T., Toriola, A.L., Shaw, B.S., et al. (2011) Anthropometrically Determined Nutritional Status of Urban Primary Schoolchildren in Makurdi, Nigeria. BMC Public Health, 11, 769. <http://www.biomedcentral.com/1471-2458/11/769>
<http://dx.doi.org/10.1186/1471-2458-11-769>

