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Consumption Of High Fat, Sugar, Salt Food (Hfss) and Its Impact on Nutritional and Health Assessment of Rural School-Going Children of Fatehpur District (U.P.)

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Abstract: Introduction - Youngsters are the assets of society in the future. In the past few decades, changing eating patterns have led to healthy snacks being swap by junk food. While unhealthy food are relatively affordable and delicious, their poor health effects outlast than these quick benefits.

Objective- The aim of this study to understand about the intake of high fat, sugar, salt food (HFSS) and its impact on nutritional and health assessment of school-going children of Fatehpur district.

Methodology- A sum of 120 students were selected from three separate schools of Amauli block of Fatehpur district. The data were collected by using structured questionnaire and extensive attention.

Results- Out of 120 students, the participants sample consisted of 60.83per cent girls and 39.16per cent boys in the age group 6-12 years. A Majority of girls 68.49per cent were more likely to eat junk food than boys 53.19per cent because almost girls prefer a delicious taste. Additionally 20per cent respondents across all age groups only checked the branded chips (lays, parle, bingo, uncle chips, pringles, bikano, diamond, balaji, haldiram) and snacks (parle fulltoss, kurkure etc.).

Conclusion- The most of students found it hard to comprehend dietary information, there is an essential to introduce educational instruction or nutrition fact labelling to explain the dissimilarity between branded and unbranded snacks and their superiority, health and hygienic and sanitary parameters.

Key words: - School going children, High Fat, Sugar, Salt (HFSS), Junk food consumption pattern, health status.

INTRODUCTION

The prime importance of the nurturers and community lies in ensuring the health of children's as they are the citizens of tomorrow's world. **(Raghava, 2005)**. Wholesome- nutrition is a basic component of well-being and plays a vital role in growth and development and the prophylaxis of disease **(Afridi and Farzana, 2007)**.

Elementary years is specifically important for proper nutrition, as it is the peak time to nutrients reserves for the exponential growth of adolescence. Optimum nutrition means during this time contributes to a healthier outlook. **(Sati and Dahiya, 2012).** Malnutrition manifests itself in many different ways: as poor child growth and development; as individuals who are skin and bone or prone to infection; as those who are carrying too much weight or who are at risk of chronic diseases because of excess intake of sugar, salt, or fat; or those who are deficient in important vitamins and minerals **(Raghuvanshi *et al*, 2020).**

India have rich heritage, food culture and mastery of blend foods, therefore country have various varities of food. School is that place where children spend most of time and learn their future. There were we lay the foundation for their habits. Eat junk food and getting fat, which is unhealthy. It can cause harm to health. Food is the major

requirement to life. Therefore sucking and gulping process starts from the birth of any newborn **(Kaushik *et al*, 2011).**

Super foods have been replaced by the modern dishes mantra – JUNK FOOD. Junk food is defined as gourmet that has unhealthy or poor nutritional value. It has high calorie but lack in essential nutrients. Fast food has a rising trends among youngsters. Fast food is defined as pre-made food that can be served instant. The word junk and fast food are often used interchangeably. But their preparation style makes them junk food or fast food. Junk food is quick, tasty, convenient and fashionable while fast food is rapidly prepared and served. Every age, every race likes to have these food and the newcomer are children. Street food are also taken in the same context as junk **(Gupta *et al*, 2018).** Common junk foods include salted snack foods (chips, crisps), candy, gum, most sweet desserts, fried fast food and carbonated beverages (sodas). Junk foods are ready-to-eat convenient, high amount of saturated fats, salt, or sugar, and little or no fruit, vegetables, or dietary fiber that are not only unhealthy but addictive and that creates a vicious cycle making it hard for children to choose healthy food. In India, even Chinese food sold in roadside stalls is junk food because they contain high amount of Monosodium Glutamate (MSG), which is a flavor enhancer. MSG is recognized as a health hazards if taken in larger quantities. Junk food are prone to put on weight, especially when eat this kind of food often. Junk food causes diabetes, heart disease, constipation and lack of concentration. **(Nicklas *et al,* 2001).**

High fat content, particularly cholesterol, sugar and salts have their adverse effects on health. Calorie with sugar can lead to obesity and type 2 diabetes mellitus. Sugar content can cause dental cavities. A short-term adverse effect as a result of eating junk foods is 'lack of energy' which occurs because junk foods don't provide essential nutrients, even though they can be very much sufficing, due to which one feels weakened. Junk food are lacking in fiber, and are made of processed foods, they are rated high on the glycaemic index, which means they provide a quick rise in blood sugar, but this also falls quickly, and giving rise to hunger **(Ashakiran and Deepthi, 2012).**

MATERIALS AND METHODS: -

The current research study was carried out in rural areas of Amauli Block of Fatehpur District. Three primary schools from Amauli block were selected for the study who received mid-day meal. Total of 120 students were taken from three primary schools from Amauli block. Thus 120 school-going students were taken for the data collection, respectively using purposive random sampling. The opted schools were explored and teachers were described about the plan to carry out the present study. With pre-approval of the principal and students of the relevant age groups were selected and explained about survey timeline. Over all information were collected by using pre-tested questionnaire at school, regarding type of family, family size, Per capita income, and education of parents, fast food preferences among school going children. Statistical analysis was completed by using frequency and percentages.

RESULTS AND DISCUSSION:

The facts on selected characteristics were analysed using descriptive statistics. The facts acquired from samples were put up in terms of age group. Table 1 summarizes the general information about the respondents. Maximum respondents, 40per cent of 10-12 years age group; minimum respondents 29.17 per cent belonged to 8-10 years age group and 30.83 per cent also belonged to 6-8 years age group. The total number of respondents were 120 out of which 73 were girls and 47 were boys. Maximum girl respondents, 56.16 per cent were from 10-12 years age groups and maximum boy respondents, 48.94per cent who were from 6-8 years age groups. 24.66per cent girl respondents of 8-10 years age groups and 19.18 per cent of 6-8 years age groups. Among boy respondents 36.17 per cent of 8-10 years age group and 14.89 per cent of 10-12 years age group. From the facts information it is conspicuous that most of the respondents, 57.50 per cent, belonged to Hindu religion followed by Muslims, 42.50 per cent. Maximum girl and boy respondents, 60.27 per cent and 53.19 per cent were Hindus, whereas 39.73 girls and 46.81per cent for boy respondents were Muslim. On the basis of family income it was found that the maximum

respondents, 40per cent had a family income Rs.6000-8000 per month, while the family income of 36per cent respondents was less than 5000Rs. About 23per cent respondents had an income of more than 10,000Rs. per month. Table 2 Indicates that majority 60.83per cent of the participants were girls and 39.16per cent participants were boys in 6-12 years age-group. Table 3 showed the percentage of fast food intake and preferences taken by students. Majority 68.49per cent of girls more like to eat junk food than boys 53.19per cent because almost girls prefer to delicious taste. 46.80per cent of boys ate samosa than the girls 42.46per cent, 32.87per cent and 19.17per cent of girls ate chips and fingers than the boys respondent 31.91per cent and 12.76per cent ate chips and finger. About 33.17per cent of boys respondent consume snacks in thrice in between meals. About 65.75per cent of girls prefer street food (mainly fast food) and 23.40per cent of boys prefer sweets (choclates, toffee). Most of the girls respondent (72.60per cent) consume street food in once a week and almost 10per cent children's consume street food almost every day. It was also found that savour, grade, suitability was the main reason for buying pre-packaged foods. Although 20per cent subjects check only the branded chips (Bingo, parle, lays, haldiram, pringles, uncle chips, bikano, balaji, diamond) and snacks (parle fulltoss, kurkure etc.). The majority 60per cent respondents considered only for the production date or end date. Most of them students, Nutritional facts were not recite because most of the students either insufficient knowledge or unknown about the labels or nutrition information or found the jargon language. Around 20per cent read quality symbols. Junk food followers ingested extra fats, sugars and carbohydrates and little fruits and non-starchy vegetables.

Vidya B. *et al.* (2015) revealed that large part of the population (50per cent) were conscious regarding the poor effects of the unhealthy food. Out of 120 children's, almost 46.80per cent of boys ate samosa than the girls 42.46per cent, 32.87per cent and 19.17per cent of girls ate chips and fingers than the boys respondent 31.91per cent and 12.76per cent ate chips and finger. **Naru *et al.* (2022)** only 25per cent of the participants were not sensible about the injurious effects and the existence of food additive and colorants in junk foods. **Bhat *et al.* (2024)** found that the endemic of malnourishments (overnutrition and undernutrition) were more among young peer-group. The study also revealed that overall ingestion of high salt, fat and sugar food was remarkable high. The results of this research emphasize the crucial need for identify dietary deficiency and overcome the triple burden malnutrition.

Table 1. General Information of the participants:

Specific	Girls	Boys	Sum
Age group (years)	**n=73 (Percentage)**	**n=47 (Percentage)**	**n=120 (Percentage)**
6-8	14 (19.18)	23 (48.94)	37 (30.83)
8-10	18 (24.66)	17 (36.17)	35 (29.17)
10-12	41 (56.16)	07 (14.89)	48 (40.00)
Religion			
Hindu	44 (60.27)	25 (53.19)	69 (57.50)
Muslim	29 (39.73)	22 (46.81)	51 (42.50)
Others	-	-	-
Family Income (Per month)			
>5000	28 (38.36)	16 (34.04)	44 (36.67)
6000-8000	26 (35.62)	22 (46.81)	48 (40)
More than 10000	19 (26.02)	09 (19.15)	28 (23.33)

Table 2. Classification of participants according to gender:

Characteristics (Gender)	Frequency (%)
Girls	73(60.83)
Boys	47(39.16)
Sum	120(100)

Table 3. Classification of the participants on the basis of Dietary Information across gender:

Nutritional Information	Girls	Boys	Sum
Food Habit	**N=73(Percentage)**	**N=47(Percentage)**	**N=120 (Percentage)**
Vegetarian	65 (89.04)	38 (80.85)	103 (85.83)
Non- vegetarian	08 (10.95)	09 (19.14)	17 (14.16)
Eggetarian	-	-	-
Meal Pattern (Per Day)			
3 Meals	25 (34.24)	14 (29.78)	39 (32.5)
2 Meals	48 (65.75)	30 (63.82)	78 (65)
1 Meals	-	03 (6.38)	03 (2.5)
Eating Snacks between Meals			
Once	21(28.76)	11(23.40)	32(26.66)
Twice	15 (20.54)	06 (12.76)	21 (17.5)
Thrice	18(24.65)	17(36.17)	35(29.16)
Never	07 (9.58)	04 (8.51)	11 (9.16)
Often	12 (16.43)	09 (19.14)	21 (17.5)
Eating Junk food			
Yes	50 (68.49)	25 (53.19)	75 (62.5)
No	04 (5.47)	05 (10.63)	09 (7.5)
Sometimes	19 (26.02)	17 (36.17)	36 (30)
Frequency of Eating Street food			
Yes	37 (50.68)	18 (38.29)	55 (45.83)
Sometimes	24 (32.87)	25 (53.19)	49 (40.83)
Never	04 (5.47)	01 (2.12)	05 (4.16)
Hardly	08 (10.95)	06 (12.76)	14 (11.66)
Once a week	53 (72.60)	32 (68.08)	85 (70.83)
Twice a week	06 (8.21)	03 (6.38)	09 (7.5)
Almost every day	06 (8.21)	06 (12.76)	12 (10)
Type of Street food			
Chinese	08 (10.95)	07 (14.89)	15 (12.5)
Sweets	16(21.91	11(23.40)	27(22.5)
Fast food	48(65.75)	29(61.70)	83(69.16)

Samosa	31(42.46)	22(46.80)	53(44.16)
Chips	24(32.87)	15(31.91)	39(32.5)
Finger	14(19.17)	06(12.76)	20(16.66)
Other specify (Burger, Chocolate, Maggi, Pasta, Ice-cream)	04(5.47)	04(8.51)	08(6.66)
Other Specify	01(1.36)	-	-

STRENGTH & LIMITATIONS OF THE STUDY: -

Overall data collection was face to face response from the respondents through structured questionnaire. It helps in examine the actual consumption pattern among school children. This is an evidence-based comparison of consumption pattern and effect of HFSS foods on nutritional and health status of girls and boys (6-12years). Larger sample size was needed to represent sample size in study area. The study shows frequency pattern of HFSS Food, 24 HR food recall method is needed to figure out the dietary intake adequacy and burden of malnutrition. We need to educate and create awareness about good dietary practices among school going children

CONCLUSION: -

Most of the youngsters eat junk food apart from daily meals. This study found that consumption of junk food like samosa, fingers, chips etc. are more high among 6-12 years school children rather than sprouts, salads and traditional millets like Jowar, Bajra. Guardians must play their part by giving super foods in the home and strengthen physical activity by control their children's entertaining activity to less than two hours a day and distribute at least five serving of fruits and green vegetables per-day and encourage them for including traditional and healthy food. The study also found that most of them students consume unhealthy snacks items (dublicate chips name chacha bhatija, snnatta and mama bhanje etc). The purpose of boosting healthy food choices through use of nutrition facts labels was not being completely met. Since a majority of people found it hard to understand nutrition information, there is mandatory to take up educational activities or initiate new version of labelling and tell him difference between branded and unbranded snacks food and their quality, health and hygienic parameters.

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