Assessment of Knowledge, Attitude and Factors affecting consumption of fast food in 8-12 years of Children: A Cross Sectional Study

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ABSTRACT:

Introduction: Fast food is processed and prepared in an industrial fashion. Most of the fast food is sticky and leads to dental caries. Fast foods are lacking in vitamins, minerals, fibres and amino acids but have high energy. The present study was conducted to assess the knowledge, attitude and factors influencing the consumption of fast food in 8-12 years old of children. Aim: To assess the knowledge, attitude and factors influencing consumption of fast food in 8-12 years of children. Materials and methods: A cross sectional semi structural self administered questionnaire was designed to collect the data. Time bound enumeration was used to recruit the participants and a total of 115 school children of age 8-12 years participated in the study. Results: Of the 115 participants, 78.8% reported daily snacking, 84.4% mentioned that the advertisements are lucrative and 60.9% stated that fast foods are consumed due to delicious taste. Conclusion: Most of the children of 8-12 years consume fast food on daily basis. Large percentages of children consume fast food due to television advertisements and delicious taste of fast food. Our findings suggest the need for strategies and coordinated efforts at all levels to reduce the tendency of consumption of fast food and to focus on balanced diet.

Key words: Fast food, Healthy diet, Advertisement.

INTRODUCTION:

In the human life, food plays a serious role as it is essential to survive. We share it with our families and our friends and that we build it a central a part of our celebrations. We shop for it, cook it, read about it, talk about it, and sometimes worry about it. (1) Consumption of fast foods has become nearly a world development. India’s fast food business is increasing at the speed of four-hundredth once a year. India ranks 10th in the fast food per capita spending figures with 2.1% of expense in annual total spending(2). Fast food is usually highly processed and prepared in industrial fashion, i.e., with standard ingredients and methodical and standardized cooking and production methods. It is usually rapidly served in cartons or bags or in a plastic wrapping, like that minimizes cost. The phenomenal growth of the nutrition business continues. Children tend to consume foods higher in fat and lower in fiber and metallic element once they eat outside. Advertisements showing sodas with fast meals instead of milk or juice motivate children to select less nutritious foods. Eating low nutrient density food in moderation does not pose a serious threat to the nutritional status of an adolescent whose basic food habits are nutritionally sound.(4)Fast food's square measure taking quality by nuclear families with operating folks have less time for
meal preparation by themselves. Most operating folks with faculty going youngsters square measure in stress.

Good nutritious diet or balance diet is need of every child for their growth and development because of the delicious taste. Most of the kids of this age throughout their time for dinner eat food and obtain hooked into the style of the food. Though, junk foods are tasty, but it has low nutritive value and high calories (6) The Global nutrition Restaurants business has managed to grow over the past 5 years despite being battered by a weakened international economy and society's increasing awareness of the health risks related to a diet high in fat, salt and sugar. The industry's tries to retort to changes in shopper preferences have conjointly supported revenue growth. Moreover, over the five years to 2022, IBIS World forecasts that the industry will continue to surge forward (7) Television viewing continually exposes children to advertising. Moreover, three-quarters of the food advertisements broadcast during children’s programs feature foods with high sugar and/or acid contents, which are potentially detrimental to oral health. It is generally accepted that the advertising of food uses persuasive techniques that can manipulate children’s food preferences and choices by triggering their motivation to purchase and consume (8)

Food is a vehicle for nutrient deliveries; it provides energy for growth, serves as a structural component, and participates in all metabolic functions of the body. A child's, food choices and dietary habits are influenced by peer pressure, accessibility, and marketing. Food companies sell their products through television advertisements, newspapers, and Internet (9)

Nutritional knowledge is one factor that influences the diet behavior of school going children, since fast food consumption of the school going children has become a serious issue which may lead toward obesity in many countries including India. It may lead to chronic diseases like cardiac problems.(10) Childhood obesity is becoming a worldwide epidemic, with excess body weight affecting some 10% of school-age children globally, rising to over 25% of school-age children in the USA and several countries in Europe.(11) Westernization following diversity, speed, and convenience was widely spread in daily life, which further promoted the development of the fast food industry. Labenskyet al define fast food as “Food dispensed quickly at an inexpensive restaurant generally offering a limited menu of inexpensive items, many of which may not be particularly nutritious; the food is consumed on premises, taken out or sometimes delivered.” (12) Eating out may lead to overconsumption and increase the risk of obesity in part because of larger portion sizes, high-energy-dense foods, and increased variety and preferred taste of the food. Fast-food consumption particularly has been related to poor diet quality and adverse dietary factors associated with avoirdupois, as well as higher intakes of calories, fat, saturated fat, and sugar-sweetened drinks. Fast food is associated with higher body mass index (BMI), weight gain, and less successful weight-loss maintenance. (13)

Hence the current study was done to assess the knowledge, attitude and factors affecting consumption of fast food in 8-12 years of school going children.

MATERIALS AND METHODS:

A cross-sectional study was conducted among 8-12 years of school going children of Nagpur with approval sought from IEC, the school authorities and informed consent from the parents. Children with special healthcare needs and children/parents who were not willing to participate were excluded. The study objective and questionnaire were briefly explained to students. A questionnaire consisting of ten close ended questions were distributed to participants. There was an active participation from all the children.

Data was obtained from the participants using a semi-structured self administered questionnaire which included details on knowledge, attitude and factors affecting consumption of fast food.

STASTICAL ANALYSIS:

Statistical analysis was done by using descriptive statistics using frequency and percentages and software used in the analysis was SPSS 22.0 version. Chi square test was employed. P value (<0.05) was considered statistically significant.

RESULTS:

Of the total 115 participated children in study, 78.3% consumed snacks apart from regular meals (Fig.1).Nearly 70.4% of participants were lured by the attractive presentation of the fast foods (Fig.2). 84.4% considered that advertisement can mould their minds in a way that they are forced to consume certain types of fast food (Fig.3). About 90.4% of children consumed fast food twice a week (Fig.4). Around 93.9% of children prefer fast food because of its delicious taste (Fig.5). Large portions of fast food were consumed by 95.7% of children (Fig.6). Wafers were the most frequently consumed food item (60%) followed by Samosa (25%) and Pizza (15%) (Fig.7). The most common accompaniment along with the fast food was sweetened fruit drink as observed in 67.8% children (Fig.8). 94% of participants mentioned that fast food consumption was higher because of its fast service (Fig.9) 56.5% children assumed that a healthy/balanced diet consists of vegetables only.
### Table 1: Questionnaire used and the responses obtained

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Frequency(n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you take snacks apart from regular meals?</td>
<td>Daily</td>
<td>90</td>
<td>78.26</td>
</tr>
<tr>
<td></td>
<td>Twice a week</td>
<td>25</td>
<td>21.74</td>
</tr>
<tr>
<td>Do you get lured by the attractive presentation of fast foods?</td>
<td>Yes</td>
<td>81</td>
<td>70.43</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>34</td>
<td>29.57</td>
</tr>
<tr>
<td>Does Advertisement mould your mind in such a way that you are</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>forced to consume certain types of fast food?</td>
<td>Yes</td>
<td>97</td>
<td>84.35</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>18</td>
<td>15.65</td>
</tr>
<tr>
<td>How often do you eat fast food?</td>
<td>Twice a week</td>
<td>104</td>
<td>90.43</td>
</tr>
<tr>
<td></td>
<td>Daily</td>
<td>09</td>
<td>9.57</td>
</tr>
<tr>
<td>Why do you prefer fast food?</td>
<td>Taste</td>
<td>108</td>
<td>93.91</td>
</tr>
<tr>
<td></td>
<td>Fast service</td>
<td>7</td>
<td>6.09</td>
</tr>
<tr>
<td>How much portion size of fast food do you usually eat?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Large</td>
<td>110</td>
<td>95.65</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>5</td>
<td>4.35</td>
</tr>
<tr>
<td>What kind of fast foods do you eat?</td>
<td>Wafers</td>
<td>69</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Samosa</td>
<td>29</td>
<td>25.22</td>
</tr>
<tr>
<td></td>
<td>Pizza</td>
<td>17</td>
<td>14.78</td>
</tr>
<tr>
<td>Why do you eat fast food?</td>
<td>Delicious taste</td>
<td>70</td>
<td>60.87</td>
</tr>
<tr>
<td></td>
<td>Diversity of fast food</td>
<td>45</td>
<td>39.13</td>
</tr>
<tr>
<td>What kind of beverages do you drink with fast food?</td>
<td>Sweetened fruit drinks</td>
<td>78</td>
<td>67.83</td>
</tr>
<tr>
<td></td>
<td>Soft drinks</td>
<td>37</td>
<td>32.17</td>
</tr>
<tr>
<td>What type of food do you think you should eat to have a balanced diet?</td>
<td>Mainly vegetables</td>
<td>65</td>
<td>56.52</td>
</tr>
<tr>
<td></td>
<td>Mainly meat</td>
<td>10</td>
<td>8.70</td>
</tr>
<tr>
<td></td>
<td>Meat and vegetables</td>
<td>40</td>
<td>34.78</td>
</tr>
</tbody>
</table>

**Fig. 1: Frequency**

- Daily: 78.26%
- Twice a week: 21.74%

**Fig. 2: Attractive presentation**

- Yes: 70%
- No: 30%

**Fig. 3: Advertisements**

- Yes: 84%
- No: 16%

**Fig. 4: Frequency in weeks**

- Twice a week: 90%
- Rarely: 10%
Rojekar NP et al. Factors affecting consumption of fast food.

**Fig. 5: Why prefer**
- Delicious taste: 39%
- Diversity of fast food: 61%

**Fig. 6: Quantity**
- Large: 96%
- Medium: 4%

**Fig. 7: Fast food preferred**
- Wafers: 25%
- Pizza: 60%
- Samosa: 15%

**Fig. 8: Accompaniment drinks**
- Sweetened fruit drinks: 32%
- Soft drinks: 68%

**Fig. 9: Why like**
- Taste: 94%
- Fast service: 6%

**Fig. 10: Balanced diet**
- Mainly vegetables: 56%
- Mainly meat: 9%
- Meat and vegetables: 35%
DISCUSSION:
In current study, almost 78.3% of children consume snacks apart from regular meals. Vidya B et al mentioned that the majority of the study population (50%) is aware regarding the adverse effects of the junk food; according to Vinay Gopal et al, only 25% of the study population were not aware regarding the harmful effects and the presence of the chemicals in junk foods. Nearly, 70.43% of participants get lured by the attractive presentation of fast foods. According to Steffi et al, fast-food restaurants serve fast and standard menus to the consumers. In this food system, the “burger” menu is the most popular one. The predominant reason for choosing fast food was convenience. Where as in the current study it was preferred due to its delicious taste. Around 93.91% of children prefer fast food because of its delicious taste. Ashakiran and Deepthi R mentioned that time factor and taste factor as an important reason that influence to opt for junk food.

Out of 115 participants almost 84.35% consider that advertisement mould their mind in such a way that they are forced to consume certain types of fast food. Other study concluded that 40.3% of the children asked their parents to purchase the goods that they saw on the television advertisements and that 8.9% of them argued with their parents and/or cried in order for their parents to buy that particular product. It was found that the children tended to request more sweetened products such as candy, ice-cream, biscuit, cake or soft drinks. According to Vidya et al, The knowledge of arrival of the new junk foods were from Television (47%) and their friends (35%). Similar findings were reported by Manpreet. Children watch television where fast foods have started domination the advertisements. Television viewing and simultaneous consuming junk foods have been reported by several studies. 61.5% of the study subjects had the habit of consuming junk foods and watching television which increases the intake of poor quality of the diet among these children. Fast food sale is promoted among children through sponsorship of sports or cultural competitions with attractive free gifts. The sponsors offer discounts on purchase of their brand of fast food.

About 90.43% of children consumed fast food twice a week. A study to assess the knowledge and practice of fast food consumption among Pre-University students in Udupi Taluka of Karnataka, India mentioned that about 1/4th of the study participants consumed fast food on an average of two to four times per week. About 60% children preferred to eat various types of Wafers, 25% like Samosa and 15% consume Pizza. Isler et al. found that more than half (54%) of the things the children asked for were snack/dessert food, candy, cereal, fast foods, and fruits and vegetables. Paley and White found that the items the children requested the most were cereals and candies and that these were the items most frequently advertised.

Of total participants 67.83% of children prefer to drink Sweetened fruit drinks as an accompaniment and ice-cream (50.7%) and coke (33.7%) were the two items which the children requested the most from their parents during shopping.

Frequent fast food eating in children potentially increases the level of cardiovascular diseases, gastroenterology diseases, and even nerve and brain diseases. The increasing trend of the modern day epidemic of overweight and obesity in children calls for immediate action through appropriate nutrition intervention programs involving school children, their parents and school authorities.

CONCLUSION:
Most of the children of all age groups eat fast food apart from regular meals. Regular meal is more nutritious than fast food. It is need of time to educate children about consumption of healthy and nutritious food. Attractive presentation of fast food attracts children towards fast food. Fast food intake among children can be reduced by implementation of stringent laws to regulate the marketing of fast foods. Nutritional labeling of food might restrict the quantity of food ordered and choice of low fat menu among children of educated parents. Promotion of healthy eating habits and education about junk foods needs to be strengthened.

The knowledge of arrival of the new junk foods is mostly from Television and their friends. The habit of consuming junk foods and watching television increased tremendously which has to be curbed. Our findings suggest the need for strategies and coordinated efforts at all levels to reduce the tendency of consumption of fast food and to focus on balanced diet. The study shows certain limitations; thus, the small size of focus group requires further research to support or reject the findings of this study. It can be concluded that the study can become a contribution to the wide future research.

REFERENCES:


