# **Review Article**

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# Growing menace of fast food consumption in India: time to act

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#### **ABSTRACT**

India's impressive economic growth in previous decades and more inclusive growth recent years have not only resulted in steadily increasing income but it brought socio cultural transformation. In this process globalization and increasing urbanization contributed immensely. India with rich heritage of foods and recipes had the tradition of preparing foods by deep frying in fats. This situation is getting complicated by emerging fast food culture in all sections of society primarily due to their readily availability, easy to access, taste, marketing strategies and cafeteria culture. Therefore it becomes imperative to introspect about fast food consumption. There are enough scientific evidences in India to substantiate that fast food have become integral component of diet in all section of society. High consumption of fast food has been reported in school going children and this is quite substantial in college and university students - in spite of the fact that a significant proportion of population are aware about adverse consequences of fast food consumption. Children of pregnant and lactating women eating fast foods are more prone to obesity. High fat and high sugar diet leads to change in fetal brain reward pathway altering food preferences. Fast food consumption is rising in India across all income categories and this is contributing significantly to rising trend of non-communicable diseases (NCDs) in this country. Regulation of marketing and nutritional labeling is not up to mark in India. Growing menace of fast food consumption needs to be restricted by adopting legal, service and education approaches for promoting healthy dietary practices.

Keywords: Fast food, Globalization, Lifestyle, Marketing strategy, NCD, Obesity, Trans and saturated fats

#### INTRODUCTION

In spite of substantial economic growth during the last few decades, extreme poverty and food insufficiency still exist in developing countries like India. High use of fast and junk food has added another big problem. It has pushed country towards double burden of diseases. Globalization of fast food has provided the flexibility of having many consumption alternatives at reasonable prices and created a slew of expectations moving forward. It has generated changes in societies and culture and also forced people to consume fancy and high calorie fast foods, popularly known as junk foods. These fast food chains have been, innovative and forceful at inviting

customers out of their kitchens up to fast food centres. Balanced diet has been replaced by junk or fast foods not only by young generation but also people from all age group demand fast food in their every-day eating habits, due to rapid increase in disposable income with changing attitude towards food choices act as a driving force for processed food which resulted in changing consumption pattern away from traditional food to processed and high value foods. These high calorie foods are steeply damaging human health and lead to metabolic changes and conditions such as becoming overweight, high blood pressure and raised blood glucose and cholesterol which are among the leading causes of death due non communicable diseases in India.

#### Fast foods and their constituents

India has rich heritage of fast foods and recipes. Fast food has become an important part of dietary menu. The term fast food and junk food are often used interchangeably. Most of the junk foods are fast foods as they are prepared and served fast, but not all fast foods are junk foods, especially when they are prepared with nutritious contents. As per the National Institute of Nutrition (NIN), "unhealthy (junk) foods are those containing little or no proteins, vitamins or minerals but are rich in salt, sugar and fats and are high in energy (calories)."Globally, the term junk food is popularly used to identify items with little or no nutritional value but high in fat, salt and sugar. Foods with similar attributes are also termed as following.

- **EDLNF EDNPFC:** Energy dense low-nutrient density foods or energy dense and nutrient poor foods for children; as in republic of Korea.
- *FMNV:* Foods of minimal nutritional value as in United States.
- Foods with imbalance of nutrients:
  - absence or limited presence of nutrients which are favourable in maintaining health such as proteins, vitamins, phytochemicals, minerals and dietary fibre;

- b. excess of nutrients that have a negative impact on health if consumed in high amounts. Such nutrients include fats, sugar and salt (sodium).
- *HFSS foods:* Foods that is high in fat, salt and sugar, by the World Health Organization (WHO) and certain other countries.

Presence of trans fatty acids (TFAs) and additives such as preservatives which are known to have negative impact on health are commonly found in processed and packed foods.

Most Indian fast foods are prepared by deep frying in fats specially trans fats and saturated fats. Trans fat content in Indian fast food are higher than western foods trans-fat content in *bhatura*, *paratha and puris* is 9.5%, 7.8% and 7.6%, respectively as compared to 4.2% in regular French fries.<sup>2</sup> Constituents of market samples of some Indian snacks (Table 1) reveal high content of carbohydrate and fat (total and saturated). According to a study trans-fat contents was highest in French fries (8.1% of total fat) followed by instant noodles (4.6% of total fat) and potato chips (4.5% of total fat). The salt content was highest in instant noodles (3.7 g per 100 g of sample) NIN recommends a maximum of 2% of total calories to come from trans fats whereas the recommendation of WHO is 1%.<sup>3</sup>

Constituent									
Particulars of food	Energy (Kcal)	Carbohydrate (g)	Sugar (g)	Fat (g)	Sodium (mg)	Trans Fats (%)	Saturated fat (%)	Protein (g)	
Indian snacks									
Haldiram Bhujia	576	38	1	40	553	0.1	6.32	16	
Kurkure	558	53.3	0.5	35.7		0.1	16.6	5.8	
Lays (potato chips)	555	51.4	4.1	35.7		0.1	16.6	6.9	
Yippee Noodles	465	63.0	3.2	19.6		0.1	10.21	8.8	

Table 1: Constituent of common Indian junk foods (per 100g).

#### Fast food market in India

A fast food restaurants, also known as quick service restaurant (QSR) within the industry, characterised by its fast food cuisine and minimal table service; typically caters to a "meat-sweet diet" and is offered from a limited menu; is cooked in bulk in advance and kept hot; is finished and packaged to order; and is usually available ready to take away, though seating may be provided. Fast food industry, originally conceived in Southern California in the 1940s, not only altered the eating habits of Americans, but also those in many other countries around the world, including Asian countries. Now days fast food industries acquired a place in people's life as such that ordering the fast food item or visiting the outlet of fast food items portrays a symbol of higher standard of living in the society for the all, availing their services.

India's fast food industry is mounting by 40 percent a year which statistically place India in 10<sup>th</sup> place in fast food per capita spending figures with 2.1% of expenditure of annual total spending. In fact fast food has engulfed every age; every race and the newest entrants on stage are children, school children particularly.5 According to the national restaurants association of India (NRAI) 2010 report, the fast food industry in India was estimated to be between Rs 6750- Rs 8000 crores, growing at a compound annual growth rate of 35-40 percent. Although a major chunk of these markets is ruled by global players but domestic players are not lagging behind.<sup>3</sup> Indian fast food market is estimated to double from the current Rs.3,400 crore in the next three years. The OSR will be more than double to around Rs 7000 crore by 2015-16 from Rs 3,400 in 2012-2013, driven largely by new store additions. Over the next three years,

new store additions will increase by 16-18 per cent annually, propelled by rapid expansion of global players in to smaller cities. The report of fast food market in India 2015-2020 drawn attention that Indian fast food market is expected to grow at a compound annual growth rate (CAGR) of 18% by 2020 due to changing consumer behaviour and demography; it is expected to be worth US\$ 27.57 billion by2020. About 10% of the fast food market in India is organized. NOVOUS estimates that the organized fast food market in India is expected to grow at CAGR of 27% by 2020. Vegetarian fast food constitutes of around 45% of the whole fast food market in India.

#### Adverse effects of fast food consumption

Fast food along with taste brings lots of health issues for one and all consuming these food items. These multibillion dollar industries have been affecting people's nutritious and healthy diet. Ingredients present in junk or fast foods are known to impact on health in several ways. Frequent fast food consumption is a health concern because most fast food rich in saturated fats, trans fats, simple carbohydrates and sodium all are nutrients which are associated with hypertension, cardiovascular diseases and type 2 diabetes. Calorie content consumed by the children of out of home meals is 55% higher than of in home meals.<sup>6</sup> According to the research, the consumption of fast food on a regular basis leads to excess energy intake leading to an increased risk of overweight and obesity.<sup>7-9</sup> Fast food consumption has significant impact on physical health (Table 2).

Impact of junk food on mental health is given in Table 3.

Consumption of fast food has effect on social health as well. School days are full of educational challenges that require long attention span and stamina. Poor nutritional habits can undermine these pre-requisites of learning, as well as deplete the strength that children need for making friends, interacting with family, participating in sports and games or simply feeling good about them. The commonest scenario noted in most homes is a child who returns from school hangs himself in front of television, faithfully accompanied by bowl of wafers, a packet of chips and can of cola. In the traditional diets class differences are not apparent. However, when children adopt to fast food culture class differences becomes more obvious. In attempt to adopt this culture child in disadvantaged position economically may resort to alter behaviour.

#### Awareness about fast food and its consequences

Awareness on junk food facts is lacking dramatically in every corner of the society. 90% of parents agree that junk food advertisements were making it difficult for them to promote healthy eating at home. 5 Consumers in the today market are more fascinated to western culture and increase in the facilities offered by fast food services driving the growth of the industry. McDonald's and

Domino's Pizza have shown over the years that consumers are comfortable with western fast food. According to a study conducted among hostel students revealed that 79% hostellers were aware about fast food. <sup>15</sup>

# Magnitude, distribution and spectrum of fast food consumption

Fast food is a growing component in diet and the frequency of fast food use has increased dramatically since the early 1970s. It is undeniable that big brand fast foods are readily available in India. Despite the high number of quick—service restaurants, it is difficult to determine how many Indians are actually consuming fast food. There is paucity of representative nation or region wise data on fast food consumption.

India participated in multi-country study on 72,900 children (6-7 years) from 17 countries and 199,135 adolescents (13-14 years) from 36 countries consumption status was considered as frequently (once/twice a week) a very frequently (three or more per week). This cross sectional study has found that 22.6% and 4.2% children consume fast food frequently or very frequently, respectively. In total 38.7% of adolescents reported frequent fast food consumption and 12.6% replied very frequent consumption. <sup>16</sup>

A study conducted on subjects 18 years and above visiting quick service restaurant (QSR) in Nagpur City reported that half of the subjects prefer to visit fast food outlets once in a week. Frequency of visits to fast food outlets by the consumers was twice in a week in 17%, thrice in a week in 13%, once in 15 days in 13% and once in month in 7% consumers<sup>4</sup>. According to online survey from AC Nielson (2005) over 70% urban Indians consume fast foods from take away restaurants once a month or more frequently.<sup>17</sup>

According to study conducted in Lucknow district on school going (9-13 years) children, 40% subjects ate pizza once a week. Burger and chocolate were consumed 2-4 times per week by 39% and 29% subjects, respectively; 35% subjects ate ice cream daily.

Cookies/ cake were consumed by 33% subjects 5-6 times per week whereas 31% subjects consumed chowmine 2-4 times per week. Maggi was consumed by 5-6 times per week by 42% subjects. Pastry was consumed by 31% subjects. Preferences for fast food across gender prevailed; 56% boy and 42% girls preferred fast food.<sup>18</sup>

Its consumption is likely to be high in hostellers. A study conducted on 1811 hostellers (both male and female) of Professional University revealed that 76.7% of hostellers preferred fast food just to satisfy their craving for different tastes in contrast to those (12.0%) that ate it as normal meal. As much as 38.7%, 22.6% and 19.8% subjects spent Rs. 21- 40 and above Rs. 60 daily on fast food purchase, respectively.<sup>15</sup>

Table 2: Impact of fast food consumption on physical health.  $^{3,5,10\text{-}13}$ 

Consequences	Underlying mechanism
	<ul> <li>Being high in fat content, high in sugar in liquid form and low in fibre junk food induces gorging that leads to obesity.</li> <li>With the high consumption of food ,the brain gets 'hit' with the fatty acids, and the fat</li> </ul>
Adult obesity	molecules cause the brain to send messages to the body cells, warning them to ignore the appetite-suppressing signals from leptin and insulin, hormones that are involved in weight regulation. Since the body does not get the signals that it is satiated it leads to over eating.  • Energy dense foods after oxidation in the body produces Acetyl Co A enzyme whose excess amount channelized out of mitochondria and participates in other metabolic pathways leading to fatty acid synthesis and biosynthesis of cholesterol  • Eating too much junk food is one of the factors that have contributed to the children hidden obesity epidemic
Hypertension	<ul> <li>High saturated fat causes atherosclerosis which is responsible for clogging of arteries as early age of 30 years and responsible for hypertension at early age.</li> <li>Sodium is known to affect rennin angiotensin systems in kidney which produces vasoconstrictive effects on arterioles, leading to development of high blood pressure.</li> </ul>
High incidence of non communicable diseases	<ul> <li>High fatty acids and cholesterolemia cause narrowing of coronary arteries of heart and brain leading to CHD and stroke.</li> <li>Trans fats clog up human arteries and cause plaque to build up contributing to heart disease and stroke symptoms.</li> </ul>
Gastritis	<ul> <li>Excess fats and oils and spices are irritant to gastric mucosa and leads to excess production of Hcl.</li> </ul>
Effect on Kidney	Since sodium excretion takes place through kidney high sodium load may be dangerous
Effect on liver	<ul> <li>High cholesterol also effects liver on the long run when it is metabolised it puts strain on the liver thus damaging it eventually.</li> </ul>
Dental carries	High sugar excretion may lead to dental carries.
Fatigued felling and craving for sugar	<ul> <li>High refined sugar puts pancreas under stress and it create high amount of insulin to prevent dangerous spike in blood sugar level because fast and junk food do not content adequate amount of good carbohydrate and protein, the blood sugar level suddenly drops after eating resulting with grumping fatigued felling craving for sugar.</li> </ul>
Carbonyl Stress	<ul> <li>Fast foods have adverse effects on phospholipids present in the cell membrane causing generation of free radicals leads to oxidative stress and its ill effects.</li> </ul>
Caffeine toxicity	<ul> <li>Used in carbonated energy drinks as an addictive stimulant; it can lead to impaired muscle and nerve functions, dehydration and host of other disorders.</li> </ul>
Type 2 diabetes mellitus	<ul> <li>Dense sugar content of fast foods can cause type 2 diabetes mellitus.</li> </ul>
Drowsiness and failure to concentrate	<ul> <li>Junk food consumption over a period of time can drop blood circulation due to fat accumulation. Lack of vital oxygen, nutrient and proteins can affect functioning of brain.</li> </ul>
Allergy manifestations (viz. Asthma, rashes and hyperactivity)	These conditions are due to flavouring and colouring present in fast foods.
Cancers	<ul> <li>Inedible, harmful and carcinogenic substances are present in fast foods when children eat from puberty affects their risk of prostate and breast cancer.</li> </ul>
Childhood obesity	<ul> <li>Pregnant mothers who eat high sugar and high fat diets have babies who are likely to become junk food junkies themselves. This is due to the fact that high fat and sugar diet leads to changes in the foetal brain's reward pathway altering food preferences.</li> </ul>
Osteoporosis	It has established root in the childhood when lifelong eating habits are being formed
Growth retardation & debilitating diseases.	<ul> <li>Deficiencies of protein, micronutrients and vitamins in junk food may be responsible for these conditions.</li> </ul>
Infertility in young man and woman	<ul> <li>Junk food can make young men infertile, even they are physically fit and in good health. Those who ate high amount of junk food were found to have sperm of poorer quality than their counterparts. High level of Trans fats had the worst quality sperm.</li> <li>Trans fat present in fast foods contributing &gt; 2% of energy intake can increase the risk of fertility problems by 70 per cent or more.</li> </ul>
Disruption of cellular environments structure and function	<ul> <li>Adverse fatty acid supplies during foetal and child development can alter fatty acid composition of membrane phospholipids (these are the lipid/fatty cells in the membrane and have an impact on the fattiness of the child) and storage triglycerides (they store unused calories in humans).</li> </ul>

Table 3 Impact of junk food on mental health.<sup>3,5,14</sup>

Consequences	Underlying mechanism
Addictive phenomenon	<ul> <li>Ingredients of junk foods give great taste and make consumer addictive. Fats and sugar in combination are capable of producing a dopamine driven sugar of intense pleasure in people with propensity for addictive behaviour. There is considerable similarity between dopamine production levels between drug addicts and junk food addicts. Addition to either one causes brain receptors receiving dopamine signals to lose their responsiveness. Thus in order to receive the same level of satisfaction there is need of increasing amount of addictive substance.</li> <li>Prolonged consumption of junk foods results in reduced activity in striatum of forebrain which register reward. Those on prolonged use of junk foods require ever increasing amounts of it to get the same high.</li> <li>Too much of junk food alters the chemistry of the brain and are addictive like cocaine. High fructose crone syrup (HFCS), monosodium glutamate (MSG), hydrogenated oils, refined salt and other chemical preservatives in processed junk food do the same thing to a person's brain as cocaine does.</li> </ul>
Alzheimer's disease	<ul> <li>Eating too much junk food or food rich in trans fats can shrink the brain.</li> <li>The impact of trans fatty acids begins to take place at the foetal stage.</li> </ul>
Attention deficit hyperactive disorder	Hydrogenated fats and kind of food children eat are responsible for attention deficit hyperactive disorder.
Low IQ level in children	Junk food contains low nutrition value tends to reduce the IQ level of children.
Depression	<ul> <li>Consuming too much fast food may cause lose of essential nutrients like amino acid tryptophan and the lack of which may increase feeling of depression.</li> <li>An imbalance of fatty acids is another reason why people who consume more junk food are at a higher risk of depression.</li> </ul>

Finding from a study conducted on college students (20-27 years) from NCR region revealed that going for snacks has been most preferred time for visiting fast food outlets followed by dinner and lunch. Young consumers visit fast food outlets one to two times in a week or in a month. As much as 28.1%, 25.1% and 33.9% subjects consumed fast food 1-2 times a month as lunch, snacks and dinner, respectively; as 11.7%, 32.2% and 22.2% subjects consumed fast food 1-2 times a week as lunch, snacks and dinner, respectively. Fast food culture is an emerging trend among the younger generation. Proximity of fast food points to household leads to increased consumption.

According to a qualitative assessment of nutrition knowledge levels and dietary intake of school children in Hyderabad children from high socio economic status preferred fast foods to traditional foods despite their better nutrition knowledge.<sup>20</sup> A study on prevalence of fast food intake among adolescents of Srinagar City revealed that fast food consumption was universal in the all age group of 14-18 years. It was only in the age group of 19 years that 4.16% respondents were not eating fast foods. In the age group of 15 and 18 years, around 50% of respondents skipped lunch. More than 60 % of subjects in the age group of 16 and 18 years spend their entire pocket money on fast foods whereas in the age group of 17 and 19 years only 50% and 41.66% respondents pocket money was affected by eating fast food, respectively. Frequency of consumption of fast food was

higher in all the age groups. During morning none of the children were consuming fast foods as they usually spent the time period at their homes. On the one hand sex and economic status were found to be chief variable in fast food consumption as girls are leading in former and adolescent students reading/ studying in private schools are up in the latter.<sup>21</sup> Fast food consumption was to the extent of 97.3% among high school boys in Mangalore City in Southern India.<sup>22</sup>

Frequency of fast food consumption once a week and twice a week was 62.67% and 15.41% respectively. In case of 7.53% subjects this was once on alternate days whereas in 5.48%, 5.14% and 3.77% this was most days in a week, once every day and more than once every day, respectively. A descriptive study conducted on young adults (aged 20-30 years) attending medicine OPD at MIMSH, Mandya City, Karnataka, India, highlighted that 67.25% males and 67.36% females like fried foods like vada bajji, 60.80% males and 62.73% females liked chats like pani puri, masala puri etc; 39.33% males and 44.07% females liked bakery foods cakes, pastries, puffs, 38.74% males and 37.0% females liked desserts sweets and chocolates; 31.14% males and 25.36% females consumed junk foods frequently whereas 09.21% males and 14.35% females consumed junk food infrequently.<sup>23</sup>

The escalating western fast food industry in India is linked to changing aspects of the Indian society, including shifting eating habits, large impacts on the economy as well as modernized country. Food is considered an important representation of all ethnic groups. Although, the trend change and its impact exist on whole society, whether it belongs to lower middle class and/or elite class. Fast food culture is vigorously uprising trend among the youngsters.<sup>2</sup>

Fast food chains are gaining popularity with nuclear families due to heavy work load and one child families, the immediate parents, grandparents and great grandparents will be more obligated to spoil and pamper that child with the fast –food luxury they can afford to take their only child out for fast food on a more regular basis. In a study conducted in Hyderabad, India children from high socio-economic status preferred fast foods to traditional foods despite their better nutritional knowledge.<sup>20</sup> One of the marked changes in the urban eating habits is the trend of dining out. As the time trend change the consumption pattern of food also changes.

#### Factors associated with fast food consumption

India has seen massive rise in the consumption of fast food over the recent few years. Various factors influenced Indian market to lean towards fast food culture involving improved living standard, rapid citification and westernization of Indian culture leading to the vigorous growth. Other factors include increasing economy and appetite for western food from customers throughout the country will hike the industry's growth to reach a CAGR of around 34% during 2011-2014.

India's dynamic turn towards globalization brings new eating practices driven by desires for status and convenience, urbanization, globalization and economic development have led to dietary and lifestyle changes that encourage the consumption of high- value added foods, including processed foods and food consumed outside the home.

The increased population density associated with urbanization makes it possible to supply cheap foods for eating outside the home; rising incomes, especially in urban areas, made overconsumption of fast food affordable, urbanization also leads to higher female labour force participation the consequent higher opportunity cost of time results in greater demand for convenience foods, and eating out. Globalization leads to exposure to global mass media (linked to increasing TV ownership and viewing) and the heavy advertising of "western" convenience and fast food that are high in sodium, sugar and fat and generally more calorie dense and that are higher refined than traditional foods. Apart from these several other factors have contributed to this phenomenal increase in use of fast food, including smaller families, greater number of working women (mothers), dual- career families, higher income households, more diverse schedule of family members, an aging population and an increasing number of one and two person households.

Families may struggle with family needs due to time constraints and busy schedules of adolescents and their parent's purchasing fast food for meals provides a convenient alternative for busy families. Furthermore, more fast food outlets and increased advertising are some of them.

Advertisements showing sodas with fast meals instead of milk or juice motivate children to select less nutritious foods. Family environment strongly influences child's eating behavior.<sup>24</sup> Parents shape their own eating style and influence children's eating behaviour and it may have intergenerational effect.<sup>25,26</sup>

A study done on hostellers of university provided conversing evidence of a direct causal link between food advertising, parent's role and behavioural pattern of the holsters about the fast food consumption. <sup>15</sup> Children are lured by these convincing marketing strategies and peer pressure. Fast food promotions, especially advertising is important component of fast food marketing among young generation.

Advertising for fast food and beverages communicates potentially powerful food consumption clues, including the images of the attractive models eating behavior through, television; advertisers can reach and manipulate the minds of the consumers. <sup>27,28</sup> Fast food restaurants are active social networks as well as, maintaining dedicated pages on the most popular media website: movies hacks, crick info, yahoo, face book, twitter and you tube.

#### Strategies for control of fast food consumption

Legislative approach

- Regulatory measures for reduction of consumption of junk foods has taken root in several countries World Health Organization (WHO), formally issued a recommendation asking for ban on junk food in schools and playgrounds in order to promote healthy diet and tackle child obesity. However, in India junk food is categorized in the category of proprietary food which is not standardized under regulations. This category of food is only expected to declare their composition or nature of food and comply with general regulation under food act.
- Imposing heavy tax on imported and manufactured readymade food items can control massive infiltration of Indian market with fast outlets which has taken place due to liberalization policy of India.
- There should be rigorous control on media advertisements and publicity by the ministry of information and broadcasting. Media rules and regulations set by cable television network act (1994) and advertising standard council of India (ASCI, 1994) be strictly enforced and guidelines related to quality of food products advertise in Indian media should be urgently evolved, implemented and evaluated for midterm corrections.

#### Service approach

- Non communicable diseases among adults have its origin to childhood and adolescents' dietary habits. This calls for curtailing fast food consumption among them. This can be achieving through provision of healthy standard foods, information campaigns, monitoring and surveillance. Price reduction on low fat snacks and placement of low fat label enhance their consumption among adolescent population.<sup>29,30</sup>
- Availability of information regarding nutritive value in menu, menu board, food wrappers and containers in fast food outlets may restrict the quantity and choice of food among children of educated parents.<sup>31</sup>
- Bringing food at school and creating fruit and vegetable environment among students in school settings and ensuring no sell of fast food in school premises by school administration are significant inputs in this direction.

#### Educational approach

 Media has significant influence on healthy life style and eating among children and adolescents.
 Educational messages in this regard should be disseminated to television, newspaper, posters and educational campaigns in schools.

Multisectoral and multidimensional information, education and communication (IEC) approach are involved to cut down consumption of fast foods and promotion of healthy dietary habits involving communities and educational institutions.

### **CONCLUSION**

Urbanization, changing, economy and market forces have resulted in radical dietary shifts with unprecedented rise in consumption of fast foods. The adverse consequences of such dietary are profound. There is a need and scope of behavioural modification in this regard. However, individual approach alone is unlikely to contract the powerful forces responsible for promotion of fast food. Comprehensive approach involving legislative, service and educational inputs are needed to curtail the menace of consumption of fast foods.

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