



Nutritional and Consumers Behavior towards Street Foods

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Authors' contributions

This work was carried out in collaboration between both authors. Author RV designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Authors SM and RV managed the analyses of the study. Authors RV and SM managed the literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

Street foods plays vital role for low and middle income group of urban peoples of developing countries, street foods meets food and nutritional requirements at very affordable prices for peoples all over the world. Mostly street foods are unhealthy foods, which is increased by high risk of contamination through physical, chemical and biological components which occurs a grave concern in the form of food safety and security. Street foods are nutritionally rich and these are rich source of carbohydrates and fats, eating which increases the risk of chronic non communicable diseases. Street foods may the increases risk of foodborne illnesses, which is the reason of food contamination through the microorganisms and so that food poisoning are developed. Due to lack of facilities, cheap raw materials, also lack of education and insufficient knowledge (GMP) of street food handlers, can cause foodborne diseases and chronic non-communicable diseases, and with which strongly influence on Food Safety, Nutritional Value and health of school children's and all urban peoples of developing countries. To troubleshoot all these problems proper health authorities should regulate the marketing of street food products and start a proper training program for the urban street food handlers and school based street food handlers, which is related to food safety, food security, foodborne diseases and non communicable diseases. In addition, the

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inclusion of food safety and food security in school courses will provide opportunities for all peoples and school children's to becomes aware about food safety, food security and nutrition. however, street foods are oftentimes an unhealthy diet and notwithstanding, street foods meet peoples dietary needs. Street food vending have occurred a vital public health issues and a major consideration to everybody. The objective of this study to describe nutritional issues of street foods to the diet, Nutritional Value of Street Foods, consumers eating habits and its impact on Health. It is necessary that, the standards suggested by the Codex Alimentarius Commission and WHO should be included, to contribute to nutritional security of street foods and public health.

Keywords: *Street foods; consumers behavior; personal hygiene; food security; nutritional value; non-communicable diseases; foodborne illnesses etc.*

1. INTRODUCTION

The World Health Organization (WHO, 1996) defines street food as foods and beverages prepared and sold by vendors and hawkers especially in streets and schools other public places for immediate consumption. In which including foods sold nearby, within the schools. In which including Chaat, Gol guppa, Samosa, Tikki, Noodles, Chowmein, Burgers etc.

The potential of the street foods in order to the improvement of the food security and nutritional status to the developed and undeveloped urban populations stay nearly unexplored [1].

The present concept to the food security and nutrients have been regularly defined as the realization of the rights to all and quality food in sufficient quantities are permanently access, based at the many practices in order to promote food health, without compromising other cultural needs, cultural diversity is also respected, and which is also sustainable as environmentally, culturally, economically and socially [2].

Junk Foods "Each intensive foods with high content of sugar, salt, fat and low content of nutritional value in view of protein, fiber, vitamin and mineral" in which including "Chips, chocolate, ice cream, soft drinks, burgers, pizzas" etc. [3].

Street foods have been sold for the many last decades. Which is the source of income and employment has been provided to the lower class peoples by which they nurture themselves. There are a dearth in street foods data which is related to the contribution to the nutritional value of the diet. This is necessary to the all policy makers and nutrition educators that they have a good understanding of all types of street foods and their nutritional value, as their consumption in many countries is habitual eating entangled

and which are leading to the development of non-communicable diseases and other nutritional problems, that which is effect the conditions related to the population health. it's particularly significantly on terms to the rising of the obesity prevalence into the different developed countries, in which especially increase obesity and other nutritional problems in the adolescents, children, man and women [1].

Foods and beverages are consumed at out of home in developing countries and which are rise and causes difference between in consumption styles. In recent studies 2.5 billion persons have consumed street foods around the world, which are due to consumption raising the importance to food safety and it is connected with the health. In different countries in around the world, particularly into Africa, Asia, Latin and America, in street foods have found detrimental pathogens and which is causing grave foodborne diseases. Food safety are profuse vital in order to undeveloped and developed or developing countries. In the world on today's, diseases are originated through food because of millions persons to catch diseases and that which are raised by food poisoning from the consumption of street foods, resulting as a health risk. Foods are contaminated by the hazardous microbes which are including- E. coli, Salmonella typhimurium, Pseudomonas sp., Staphylococcus aureus and Proteus etc., which is contaminated through the storage of foods, food preparation process and services, which has harmful effects on health consequences and causes deaths in thousands [4].

Several adulterant and contaminants are also have found in street foods in which included- non food grade chemicals, additives, such as colorants and preservatives and contaminants such as pesticide residues. Food spoilage can be prevented through the proper use of spices, salt, nitrate and sugar etc. The excursion of keep cost

low several leads to the buying of cheap ingredients containing unpermitted chemical additives by unauthorized sell. For the situation in which street foods is sell, it's concern with the street foods are contaminated from heavy metals and pesticide residues. The contaminants in food are arrive through the utensils, raw materials, used transportation methods and inappropriate storage facilities etc. Buying Ready to Eat (RTE) foods and ingredients of street vendors makes sufficient hazard for public health, particularly because of lousy hygienic practices. At majority of cases, the vendors don't keep sufficient washing materials and certain vendors initiate theirs duties without acceptance of suitable bath. The few vendors to sleep on vending point so that secure their wares [5].

Street foods are growing popularity from some key factors are including low cost, accessibility and convenience etc. women performed most important contribution into the street food sectors from the directly or indirectly involved into the business. The diversification so that occur into the street food handlers or vendors are reflected into the types of food those are prepared and sell, theirs business scale, which are operated through the system, those locations there where are foods prepare and sell, foods to sell through womens are existing, the food choices depends on their the types of clients choices and so further. Street foods that's often undocumented and ingredients specially is region. Therein is several variety as it's a improbable to provides a menu of all different street foods used around the world. Street foods are included- Samose, Chole Bhature, Sabji Puri, Bhelpuri, Ice-cream, Veg. Biryani and more also drinks includes- Fruiti, sugar cane juice, fruit juice, lassi. Many other famous snacks Spring Roll, Burger, Momos, Chowmein, Macaroni, Cotton Candy and Roasted Corn, Bhuja Namkeen etc. [5].

Street foods is a source of cheap and culturally acceptance that is convenient and often attractive food items in order to the both urban and rural persons all over the world. Although it's a general fact that street foods contains unhealthy dietary nutrients which are physical, chemical and biological agents with higher risk of contamination, which becomes a serious concern regarding food security. children who skipped homemade breakfast, those children get Street food in convenient outside the school. The positive correlation sure to enhancement of street foods consumption, skipping the breakfasts and rises the body mass index (BMI)

were occurred in adolescents and other peoples. The wide variety of street foods or junk foods are available in outside of all schools. Cafeterias of the schools offer soda, cold-drinks, chips and numerous different foods in low nutritional value. Sellout to the junk foods into the school cafeteria oftentimes competes by much nutritious school lunch schemes. Mostly western countries and some schools in India has banned marketing to the junk foods at the school cafeteria. India have rich inheritance to street foods and recipes. Famous north Indian street foods are included Spring roll, momos, aloo tikki, bhel puri, chaat, pakora, chole bhature, pavbhaji, dhokla, samosa pani puri and egg roll etc. Calorie and fat quantity into the Indian street foods depended at the cooking methods. Consumption of diet into the high quantity of sugar, saturated fat, salt and calorie in children and other peoples may lead to hypertension, early development of obesity, dyslipidema, impaired glucose tolerance and other non-communicable diseases [3].

Inadequate knowledge about basic food safety measures in street food handlers, which pose a risk of spread foodborne illnesses to community. Foodborne illnesses increase due to microbes and the risk of increasing non communicable diseases which in increased by consuming unhealthy food through consumers. This is focused on food security and nutritional issues, gained prominence in the first half of the world stage in 1963 with the Codan of the Codex Alimentarius by Food and Agriculture Organization (FAO) and World Health Organization (WHO). The Codex Alimentarius is considered based on scientific principles and guidelines which is governing various discoveries about to food. The Codex Alimentarius have like major objectives that protects the health of consumers in which including to increase food safety, to promote healthy foods, to reduce the risks of chronic non-communicable diseases, to ensuring adequate practice of food preparation by the development of food standards, guidelines and codes of conduct and other different recommendations are included [2].

2. OBJECTIVE

- To described nutritional issues related to street foods to the diet.
- Nutritional Value of Street Foods.
- To examine the Eating Habits of Street Foods of the Consumer's and Its Impacts on Health.

Table 1. List of street foods and their nutrient composition

S. No.	Street foods	Nutrients
1.	Fried potatoes chips	Energy (fat + carbohydrate)
2.	Fried rice	Energy, Fat
3.	Samosa	Energy, fat
4.	Fried groundnuts	Protein, energy, low fat
5.	Sweetened & Flavoured water	Energy - potentially dangerous artificial flavorings or colorants
6.	Ice cream cone	Energy, fat
7.	Candies/sweets	Energy
8.	Water	Some minerals
9.	Biscuits	Energy & fat
10.	Juice (industrially packaged)	Energy
11.	Popcorn	Energy
12.	Puffed rice	Energy, some fat
13.	Sabji Puri	Energy, Fat
14.	Pani puri	Energy, Protein, Fat [23]



Fig. 1. Different types of street foods that are prepared by vendors and consumed by consumers

Table 2. Concentration of transt fat in street foods

Street foods	Trans fat content (%)
Bhatura	9.5%
Parantha	7.8%
Puris	7.6%
French Fries	4.2%

3. REVIEW OF LITERATURE

According to Kotecha P.V. et al. [6], stated that the development of healthy eating habits is important as the rapid physical growth in adolescence is associated with increased nutritional needs. Various studies on diet and nutrition intake of adolescents and young adults in the developed world have shown that their diets are often high in fats and refined carbohydrate. Adolescence is also a period of increased vulnerability to obesity. Lack of physical activity and outdoor sports, along with the consumption of fat- rich 'junk' foods, is the major cause of obesity among the affluent population. Consumption of diet high in sugar, saturated fat, salt, and calorie content in children's can lead to early development of obesity, hypertension, dyslipidaemia, and impaired glucose tolerance.

Cirelli & Privitera et al. [7], Food and Agriculture Organization (FAO, 1995) defines, "street foods are ready-to-eat foods and beverages prepared and/or sold by vendors or hawkers especially in the streets and other similar places." They represent a significant part of urban food consumption for millions of low- and-middle-income consumers in urban areas on a daily basis. Street foods may be the least expensive and most accessible means of obtaining a nutritionally balanced meal outside the home for many low-income people, provided that the consumer is informed and able to choose the proper combination of foods. It is a vertical food consumed standing and despite changing social and environmental conditions continues to be a poor food, but fashionable and traditional at the same time.

Winda Irwanti et al. [8], conducted a study on, Mostly school age children have many activities outside house, resulting in delayed or missed breakfast whereas skipping breakfast in children lead to empty stomach and reduced blood sugar levels (hypoglycemia), causing weakness, drowsiness, difficult to accept the lesson, as well as decline in the passion to learn and the ability to respond.

Imathlu [9], reported that, the role of street vended foods in nutrition interventions and contribution towards ensuring food security, though clearly important and necessary, has not received the attention it deserves. micronutrient deficiencies remain major public health problems in developing countries in both rural and urban

contexts with deficiencies of vitamin A, iron and iodine, for instance, being the most prevalent. Although various strategies have been explored in order to mitigate this problem, little efforts have been made to utilize the easy to prepare, readily available, cheap and convenient street vended foods to help in solving these problems. Owing to street foods diverse nature, it is difficult and inappropriate to generalize on their nutritional composition from the few analyses that have been carried out on some of them to date. Different street vended foods are expected to have different nutritional contents depending on the types of the raw materials and quantities used, which vary widely. Their ingredients are rarely declared and/or analyzed, making it difficult to estimate their nutrient content in the diet.

Cheng Y, et al. [10], said that the, Unsafe food poses global health threats, endangering everyone. Food can be poisoned at any point of production and distribution. Major sources of food poisoning include pathogenic microorganisms, toxic animals and plants, chemical contamination, illegal additives and toxic industrial waste. According to the World Health Organization, foodborne and waterborne diarrheal diseases kill an estimated 2 million people annually, mostly children and particularly in developing countries, though serious foodborne disease outbreaks have happened on every continent in the past decade, partially due to inadequate food safety laws, weak regulatory systems, and lack of education for food handlers and consumers.

Jaya Shankar et al. [3], assessed, Hydrogenated oil used in Indian cooking are rich in trans fats and have been replaced in many restaurants by refined vegetable oil. Trans fat content in Indian street food are far higher than western foods.

South Indian foods like idli and uthappam are better as they are rich in carbohydrates and proteins rather than fat. Street foods have high level of fat and sugars that are not only unhealthy but addictive and that creates a vicious cycle making it hard for children's to choose healthy food. High content of trans fat in commercially available street foods predispose children to risk of future heart diseases. Energy density of street food is more than twice the recommended daily allowance for children. Street food intake leads to higher proportion of calories being derived from total and saturated fat. Moreover, the micronutrient content (carotene, vitamin A,

vitamin C) of the street food is also low. Low levels of calcium and magnesium in the diet can contribute to osteoporosis. Diets rich in free sugars can lead to increased risk of dental caries.

Cheng Y, et al. [10], said that the young have always been a group particularly vulnerable to food hazards. They are more prone than other ages to consume food with the risk of safety problems at and outside homes. It is during these formative years that people develop their perceptions toward food safety, as well as toward sources of food safety information. Education on food safety is helpful for the young because they will need it to develop proper attitude, sound knowledge and skills to understand contemporary food issues. Hence, understanding food safety knowledge, attitude and practices of young students is key to identifying ways to give better education and to minimize the risk of foodborne diseases.

Staab EM, et al. [11], reported that the Researchers have argued that changing activity and food consumption patterns are major factors underlying the emergence of obesity in middle-income and lower income countries (Popkin Et al., 2012). Refined carbohydrates, sugar, animal sourced foods, and edible oils, often packaged into processed foods, have become increasingly common in recent decades.

Sanlier N, et al. [4], conducted a study on, Widespread urbanisation and population growth in some countries in recent years has in part driven the development of the illegal street food sector. Although the FAO and WHO determine international rules according to feasibility studies to ensure the safety of foods sold and consumed in the street, in most countries the sale of street food is an unrecorded and illegal market. Studies have shown that in most countries' policies there is no legal arrangement for food safety or the sale of street food. The preparation and sale of food has become an area of self-employment for those that have little or no education, unemployed, and having financial difficulties in urban areas, as the number of people buying from this sector is considerable.

Steyn, Labadarios, (2011), reported that, It is often typical of the place, but in some cases, the variety is the point of having lost the original cultural link with the territory of origin, characterized by multi-ethnicity and beyond. A long list of street foods linked to specific cultural

environments, today are examples of globalized food (e.g. Turkish kebab).

Privitera D, et al. [7], stated that, In this framework regional products are opposed to exotic products but in fact appear more as a behaviour characterized by a plurality of models. In many cases, street food is united with junk food, but they are different products. In fact, the increase in the quantitative availability of food in developed countries has been to the detriment of quality, at least until the last few decades. They have become part of the daily snacks, and packaged foods with uncertain nutritional value and that are high in chemicals not healthy for the body, with a consequent impact on obesity, particularly in the younger classes. Nevertheless, the consumer buys constantly similar products because they meet both the needs of hedonistic taste, understood as sensory satisfaction of the palate, and that of convenience and comfort.

Privitera D, et al. [7], said that, street food is particularly sought at itinerant markets, present in every urban center or festivals, a true mix of sacred and profane, a reason to return to their native places of the many emigrants, and prepared by tradesmen, often on a provisional banquet but also in vans equipped for that purpose, or from small local spread in the historic centers. In fact, given the characteristic "on the road" problem is the perception of hygiene on the part of the application that limits in part the success of street food despite strict federal, national, and community regulations that ensure food security to the consumer. The street food industry offers a significant amount of employment (Bensman, D. 2014), often to persons with little education and training (Latham, 1997).

Islam N, et al. [12], reported that, Street foods provide an available source of food to all classes of people. There are many food items and beverages are found at the street and many sellers sell the similar items. Mostly, these items include snacks like sweets, different types of fries, vegetables, foods and drinks such as soft drinks, fruits juice, etc. However, cooked foods are also sold, often on the road sides. Street food plays a very important role for fulfilling the nutritional needs of the people living in developing countries. In developed countries, street foods are highly attractive as those are very difficult to prepare at home. Due to fast life, these people prefer eating street food more than home-made food. Moreover, the street foods are

hygienic in those places and their physical environment is also favorable. But in Developing countries, street foods are not preferred by the mass people as those foods are unhygienic and health hazardous. The environment is also not favorable due to very high dust in the air and at the street as well. Although, the people know that the street foods are unhygienic, they prefer eating those foods due to habit and taste. People of different classes, from different areas, specially the poor & lower class people come in search of job for better earning. They get engaged themselves in different work like day laborer, rickshaw puller, hawker, vendor, etc. These people during the break time or meal time cannot afford to go on a restaurant. So, they have to rely on the street food which is cheap and tasty to them. Besides the students, people from the middle class also come in the weekend for street food because of the attractive appearance of the food items. The street foods are eaten primarily by the students, youths, and street people to fulfill their hunger at the daytime.

Kok and Balkaran [13] conducted a study on, the hygiene practices of vendors and identified those global practices for street food vendors.

Sekar and Thamilselvi [14] assessed the buying behavior and consumer awareness toward street foods. They found that consumers are aware of the quality of the street foods and access to the outlet. In another study Sekar and Thamilselvi [14] examined the consumer's preference of street foods and underlying factors to prefer SVF (Street Vended Food) outlets. Taste and aroma factors are given most priority in choosing SVF outlets in India. Five factors such as, Economic, personal, lifestyle changes, Social and cultural factors and other factors influenced consumer's buying decision in SVF outlet.

Kharel N, et al. [15], said that, the Street foods are Ready-To-Eat foods prepared and/or sold by vendors in public place, and are appreciated for their unique flavor and convenience, as well as for maintaining the nutritional value of traditional foods. Street foods ensure food security for low-income group urban populations. Vendors are often with no formal education, untrained in food hygiene, and work under crude and unsanitary conditions and have no or very little knowledge about the cause of food-borne disease. Irrespective of its health effects, people consume street foods in day-to-day life which are sold in the streets, public places, busy market places, school areas, near college campuses, and taxi

stands, etc. Although there are scanty studies on street foods in India, some studies have revealed that as many as 20 to 30% of foods are consumed as street foods in India. The consumption of ethnic street foods is quite popular in both Gangtok and Nainital by local people as well as by tourists, mainly because these regions are popular tourist destinations in the country. Common ethnic street foods of Gangtok are samosa, kachori, puchkka, alu chop, vegetable momo, pork momo, alu-cheura, vegetable chowmein, jhalmuri, and syafaley and common ethnic street foods of Nainital are samosa, kachori, pani puri, alu tikki, vegetable momo, mutton momo, bread chop, vegetable chowmein, jhal-muri, and vegetable pakoda. The vendors prepare foods locally at their homes and the foods are sold in the streets, public places, busy market places, school areas, near college campuses, and taxi stands, etc.

Dun-Dery EJ, et al. [16], stated that, Food-borne illness or food Poisoning is any illness associated with eating food contaminated by disease-causing bacteria, viruses, or parasites; natural toxins in plants or animals. Food is said to be hygienic when it contains no hazardous substance that could be harmful to human or animal health. Though this is the case, microbiological hazards in ready to eat food and chemical hazards, mostly pesticides from agricultural products including fresh vegetables and fruits have been highlighted. Diarrheal diseases due to contaminated and unhygienic food are among the leading causes of illness and deaths in low-income countries, and several outbreaks of disease have been attributed to consumption of street food. The sources of food contamination are but few of the roots and sources of contamination that are known in the limelight. Very little is usually known and explored about how street food vendors themselves perceive food safety and how to practice it.

Isaac M, et al. [17], said that, Food contamination in developing countries is caused by many factors including traditional food processing methods, inappropriate holding temperatures, and poor personal hygiene of food handler. Further, the prevalence of food-borne illnesses in developing countries is intertwined with other economic and developmental issues, namely, legislation, infrastructure and enforcement mechanisms. Specific examples include inadequacy of food safety laws, laxity in regulatory enforcements, and the lack of

education for food handlers. The incidence of food- and water-borne diseases per child per year in Africa and food and water-borne diarrhoeal diseases are estimated to cause between 450,000–700,000 deaths in Africa annually, with many more sporadic cases going unrecorded. In most of these cases, pathogens such as *Escherichia coli*, *Bacillus cereus*, *Salmonella*, Hepatitis, *Shigella*, *Brucella*, *Staphylococcus aureus*, *Campylobacter*, rotavirus and enteric bacteria are identified.

Dr. Vaida N, [18] & Nelia et al. (2011), in their study found that large percentage of the population purchase street foods and fast foods. This is of some concern when one notes the high prevalence of soft drink consumption in terms of its association with obesity and non-communicable diseases. These findings need to be taken into consideration when evaluating dietary patterns and nutritional adequacy of population data.

Anderson et al. [19] in their study found that the prevalence of fast food consumption is high in the US across education, income and racial groups and is strongly associated with obesity. A positive relationship between the density of fast food outlets per area and the obesity status of children has been reported by Frazer and Edwards (2010).

Kerri et al. [20] in their study found that fast food purchases for family meals were positively associated with the intake of fast foods and salty snack foods for both parents and adolescents; and weight status among parents.

Yadav P, [21], reported that, Indian food laws may vary from the laws of the exporting country. However, being a signatory to the World Trade Organization (WTO), India cannot stop the entry of foreign products and thereafter has to incorporate the standards suggested by Codex Alimentarius Commission unless scientific basis is provided to do so. In order to ensure that the food sectors match up to the best global standards, the Government of India enacted an integrated food law called the Food Safety and Standards Act in August 2006 and in addition a Food Safety Authority is being established shortly. The FSSAI is country's apex food regulator, has formulated a strategy comprising four annexures to take up the task of harmonizing India's food standards with those laid by Codex Alimentarius Commission, established by the United Nations, WHO and the FAO. FSSAI is to make food safety a nationwide movement, to lay down science based standards

for food articles and to regulate their manufacture, storage, distribution, sale and import to ensure the availability of safe and whole some food for human consumption. The wide variations in the usage of food additives and consequent technologies, with the government's economic policy and the influx of imported food items containing ingredients not permitted under the PFA Act 1955 in India, the regulatory authorities are flooded with requests to liberalize food laws and permit the use of a greater variety of food additives. In addition, traders are more readily going in for importing ready-to-eat foodstuffs containing various additives.

Mishra S. [22], assessed, the importance of optimal nutrition for health and human development is well recognized. Achievement of food adequacy at the national level is necessary. This can be achieved through a sustainable food based approach. Food safety, Risk Management and Food control are the three components of risk analysis. All developing as well as European countries should adopt this HACCP measures, if they do not exist already. However, they need to be evolved locally by each of the units and strictly implemented rather than relying only on certification. HACCP can be easily applied to small and tiny scale food industries. However food safety education for food handlers is the most essential intervention in recent times all over the world. Codex plays an important role in promoting Food Control and Food Safety issues.

4. CONCLUSION

In developed and undeveloped areas of India and other different countries the street food nutritional issues, their impact on health, and food safety and security issues take on increases occurred further. We cannot ignore street food business in developing countries as it has become the main means of livelihood to improve the lives of many unemployed peoples. Street food is playing an important role that meets the food and nutritional requirements of peoples at very affordable prices. But the Mostly street foods are unhealthy foods, which is increased by high risk of contamination through physical, chemical and biological components which occurs a grave concern in the form of food safety and nutritional security. For most children's and other peoples of urban area of developing countries, street foods and junk foods have become an important part of the dietary menu, which has very harmful effects on our body. The main cause of foodborne illnesses, Street foods

are prepared under the unhygienic conditions by the food handlers due to lack of guidance and knowledge of food safety. Street foods may increase the risk of foodborne illnesses, which is the reason of food contamination through the microorganisms and increase the risks of food poisoning, with that diarrhea disease and other foodborne illnesses and waterborne diseases are developed. The main cause of nutritional issues of street foods is related to the chronic non-communicable diseases. Street foods are nutritionally rich and these are rich source of carbohydrates, sugar, salt, Trans fat and saturated fats, eating which increases the risk of chronic non-communicable diseases may lead to development of obesity, hypertension, diabetes and cardiovascular diseases. The main cause of all these problems is mostly related to the eating habits of children and peoples, and food contamination are caused through different factors which including, inappropriate holding temperatures, traditional food processing methods, and poor personal hygiene of food vendors. But also nutritional value of street foods depends on food preparation methods, time and temperature use at the time of cooking foods. Mostly due to lack of facilities, cheap raw materials, also lack of education and insufficient knowledge of street food handlers (GMP, GHP and HACCP), can cause foodborne diseases and chronic non-communicable diseases, and which are strongly influence on health of school children and all urban peoples of developing countries, also Food Safety and Nutritional Value is also affected. However, street foods are oftentimes an unhealthy diet and notwithstanding, street foods meet peoples dietary needs. To troubleshoot all these problems proper health authorities should regulate the marketing of street food products and start a proper training program for the urban street food handlers and school based street food handlers, which is related to food safety, food security, foodborne diseases and non-communicable diseases. In addition, the inclusion of food safety and food security in school courses will provide opportunities for all peoples and school children to become aware about food safety, food security and nutrition. This is necessary to the food handlers to increase knowledge of food safety, personal hygiene and awareness for HACCP, FSSAI & nutritional security, Good Hygienic Practices (GHP) and Good Manufacturing Practices (GMP). It is important for all consumers that they should be aware of what the effect of eating street foods or junk food will have on body and

the food should be prepared under hygienic condition and should also be aware of the nutritional value of the food being eaten outside. This is necessary for all consumers and educated parents to encourage their children to eat healthy food and eat it themselves. It is essential that, the standards suggested by the Codex Alimentarius Commission and WHO should be included, to contribute to nutritional security of street foods and public health.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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