



Unhealthy fat in street and snack foods in low socio-economic settings in India

Monday, 29 June, 2020

Joshna Joseph

India comes under the category of developing country as 70% of India's population lives in rural areas and the other 30% in the urban areas.

Street food has always been a centre of attraction for all kinds of people including tourists. Street foods are difficult to avoid due to its irresistible appearance, low cost and its characteristic flavours.

People nowadays are more curious about different kinds of street foods prepared around the globe and thanks to the social media for promoting these food preparations. Most of the street foods are either deep fried or shallow fried items which contain a good amount of unhealthy oil/fats in it along with sugar and salt.

Some of the common Indian street foods include samosas, chole bhature, vada pav, bhajji, jalebi and medu vada, which are usually deep fried and the oil used for deep frying is of poor quality and most of them are fried in partially hydrogenated oils (vanaspati) containing saturated fats and trans fats.

Trans fats are unsaturated fats which are usually produced during the process of hydrogenation of oil and also while reusing the cooking oil. Trans fats are known to cause cardiovascular diseases if consumed on a regular basis. The main source of trans fat is not packaged or labelled food but street foods which come under the unorganised sector. It was also observed that the consumption of freshly prepared street food was more in the rural areas as compared to the urban areas.

Street foods are generally freshly prepared along the streets and most of the snack products are packaged in transparent plastic covers without any labels. People in the rural areas are not aware about food labelling and the information it contains. Street foods in rural areas are prepared in a very unhygienic manner and the raw materials used in preparing the food

are of low quality as using good quality raw material will increase the cost of the product and which in turn may lead to decrease in the sale of the product.

People in the rural areas are mostly attracted to foods which are appealing to the eye and cheaper as compared to other packaged and branded foods. Street food vendors make use of various synthetic colours and flavours to make the food look attractive, these colours and flavours are of lower grades and may affect the health of the consumers. These street food vendors are not aware of the fact that the repeated use of cooking oil is harmful for health as well as deteriorates the taste of the prepared food.

Also, street food stalls in rural areas have questionable sanitation and hygiene standards due to which there is a high risk of foodborne illnesses and food poisoning from physical, chemical and biological agents - a big concern related to the safety of food and consumers.

Microorganisms such as *Listeria monocytogenes*, *Salmonella* spp., *Staphylococcus* spp., *E.coli*, *B.cereus*, *Clostridium* spp. are known to cause foodborne illnesses, of which the *Salmonella* spp. is the most common one to spread foodborne diseases and food poisoning. Also, street foods are prepared in open places where the food is exposed to the environment making it susceptible to contamination.

Moreover, due to a number of variety of street foods available all over the country there is no specific standards or guidelines targeting the street foods.

Since, most of the street foods are fried the oil is repeatedly reused as the vendor cannot afford to replace new oil everytime a new batch is prepared or the vendor will repeatedly pour new batch of oil as and when the quantity of the oil used for frying reduces. Repeated heating of the oils leads to the formation of various harmful substances such as polar compounds, trans fats and free radicals. Long term consumption of food prepared in such oils may lead to diseases such as Alzheimer's, liver disease and heart diseases to name a few. Few street food vendors in the urban areas have started making use of food grade antioxidant powders to prevent the oil from becoming rancid.

FSSAI has set the limits for trans fat to be not more than 5% and is aiming to bring it down to 2% by 2021. FSSAI has also finalised the limits for total polar compounds in order to protect the health of the consumer. The total polar compound in oil should not exceed 25% above which the oil must be discarded.

In a survey done by FSSAI, it was observed that most of the street food vendors oil total polar compounds went beyond 40% which is quite alarming. FSSAI has started implementing the EEE strategy i.e. education, enforcement and ecosystem. To reduce the use of used cooking oil, FSSAI has launched Repurpose Used Cooking Oil (RUCO), which came into existence from July 1, 2018. It helps the food business operators to discard the used cooking oil. The used cooking oil is collected and is converted to biodiesel.

The street foods sold in Kankaria Lake Ahmedabad had very low sanitary and hygiene standards. The FDA took charge of the whole street food area and started educating the vendors regarding issues related to food safety, hygiene standards, waste disposal, personal hygiene and food preparation demarcations. The Kankaria lake street food is Indias first ever Clean street food hub. FSSAI is aiming to educate 150 such street food vendors across the country.

We can conclude that street foods are of low nutritional quality and are dense in carbohydrates, saturated fats, sugar and salt which can cause chronic non-communicable diseases if consumed regularly. Although street foods are convenient, cheap and appealing and provide employment to most of the people in the underdeveloped and developing countries, the use of cheap ingredients and difficulty in providing proper sanitary and hygienic conditions is a great threat to the safety of the consumers.

Awareness among street food vendors and imposition of strict rules and regulations in the rural and urban areas is the only way to improve the hygiene and sanitary conditions of the street foods prepared to improve the health and safety of the consumers.

(The author is quality assurance executive at Candor Foods Pvt. Ltd, Navi Mumbai. She can be contacted at joshnajoseph162@gmail.com)