Food & Hospitality Industry during Pandemic

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COVID-19 has brought in tough times for all kinds of businesses, ventures, and production houses. Only food, medicine, and some other essential supplies were allowed during lockdown periods. With limited manpower and resources, the supply of a sufficient amount of safe food to all the people in the country has been a challenge during these pandemic times. Although all the restaurants and eateries remained closed during the lockdown, the food processing industry kept on working to provide safe food material like bread, milk products, wheat, pulses, beverages, meat, and poultry products.

Safe food during COVID-19 implies that the food which is free from any kind of contamination, especially CoV-2, while going through the processes of processing, production, distribution, storage, preparation as well as supply chain. Food safety is the responsibility and joint effort by each one involved in the food supply chain i.e. farmers, producers, retailers, caterers, and even housewives cooking food in kitchens.

NDMA (National Disaster Management Act) has been in force and sufficient additional guidelines were issued by MHA (Ministry of Home Affairs) to all the operators in addition to the legislation and controls that were in place to reduce the risk of contamination by CoV-2. However, to strictly follow those guidelines and to ensure that there is no contamination in food stuff, each one involved in food industry had to play significant role[1].

In a food processing unit or hotel kitchens, the virus can spread from two main sources viz. a) directly by human transmission, through respiratory droplets when the person carrying the virus either sneezes or coughs, or b) Indirectly through contaminated surfaces that contain the virus when an infected person touches them after touching his nose, mouth, or eyes. There is no reported evidence of faecal-oral transmission as well as case of COVID-19 transmission linked to food items. However, this does not mean that food cannot act as a vector for transmission of CoV-2.

Like most viruses CoV-2 is an obligate intracellular parasite and need to enter living cells to survive and to replicate.

Unlike bacteria, they never replicate in food. Consequently, viruses never cause deterioration of the food product and the organoleptic properties of the food will not change due to viral contamination. However, the virus can remain in contaminated food for some time and enter the human body resulting in an infection. The chances of virus transmission following this mode are negligible, if we consume freshly heated/cooked food and therefore during COVID-19, the main risk involved is that of human to human transmission during food handling from close contact with infected food handler or customer.

Current evidence on other coronavirus strains shows that while coronaviruses appear to be stable at low and freezing temperatures on food surfaces for a certain period, however food hygiene and good food safety practices can prevent their transmission through food. The best practice for food business operators and consumers is to maintain high standards of personal hygiene, the standard protocol of social distancing and limiting social contact, and detecting /isolating the infected persons from food handling operations[2].

Therefore, in order to ensure food safety, the food and hospitality industry has to ensure personal safety, because if anyone in the supply chain is not safe or has CoV-2 infection, all the people coming in contact with the food will have high chances of catching the infection. Along with personal safety we need to ensure safety of the raw material coming from the red or orange zones.

One of the ways to handle this is to set up Critical Control Points or CCPs at intervals to ensure that all the workers are sanitising themselves before and after touching any of the food products. The raw materials should be sanitised properly before they enter into a facility for production, processing or etc. Basic measures like increase in handwash, use of sanitizers and proper hygiene should be mandatory with assigning a hygiene supervisor, who would guide the people to sanitize and the proper way of sanitizing themselves and the food products. The certifications like ISO, FSSAI, BRC all of these have emergency protocols that need to be followed.

The restaurants and eating joints are now opening up in India as well as in most other countries with strict social distancing norms. Although most of them have opened their kitchens only and allow only take away and no dining, but several of them have opened fully and have allowed seating as well. Many popular eating joints have come up with very innovative ways to ensure social distancing while seating in their joints. Some interesting examples include the following

a.) A restaurant in Iloilo places teddy bears on alternate seats to ensure social distancing during dine in time. This enables the outlet to work at 50% capacity while ensuring proper social distancing norms[3].

b) Burger King has introduced social distancing crowns in an outlet in Germany with the help of large crowns. These crowns ensure a minimum distance of 6ft. amongst customers[4].

c). An outlet in Italy has introduced social distancing whooper, which contains triple amount of raw onion than usual. The philosophy behind this is that raw onion would generate large amount of bad breath and won't allow people near you[5].

d.) Malak Al Tawouk a restaurant in Dubai, has decided to build glass partitions amongst two tables, enabling diners to remove their masks or face shield while having their meals and also ensuring 2m of distance amongst two separate groups[6].

e.) Mc Donald's opened its 315 outlets across the country on June 8, and it has prepared a 42-point checklist to comply with government guidelines e.g. regular sanitisation of door handles, mandatory temperature checks and hand sanitizers for customers before entering the restaurants, sanitisation of all tables and chairs, trash cans, along with food trays, after every use. Washrooms are also sanitised every 30 minutes.

f.) Creator a diner based in San Francisco have taken several

measures to contain the virus and involving the least possible number of humans to carry out their daily orders. They have developed a transfer chamber that protects the inside of the restaurant from outside air and uses a positive pressure system combined with a self-sanitizing conveyor. All the people inside the outlet have to wear PPE kits, which are inspired from Biosafety Level 1 practices[7].

All these measures sound very interesting and safe but there are certain issues for which we do not have any suitable answer at this stage or which needs to be addressed suitably viz.

- How safe is to sit in a restaurant in presence of an asymptomatic CoV-2 positive patient i.e. transmission of infection during air conditioning?
- How to deal with and sanitize the food packet received from an eatery or take away joints?
- What care should be taken with a polythene wrapped food item like cakes, biscuits etc. immediately before consuming.

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