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COVID V/S food safety: A review

Abstract
COVID virus are most commonly passed between animals & from person to person. The source of virus is believed to be animals, but exact source is not yet known. The virus is commonly passed on-

- Directly through contact with an infected person’s body fluid for example droplets from coughing and sneezing.
- Indirectly through contact with surfaces that an infected person has coughed and sneezed on.

Currently there is no evidence of food or food packaging being associated with transmission of Covid-19. But in every chronic situation hygiene maintenance is important to be safe and also in any situation we can’t live without taking food so while preparing, purchasing or delivering food we have to take some precautions.

Keywords: Covid-19, HACCP, GMP, GHP

Introduction
Unlike foodborne gastrointestinal (GI) viruses like norovirus& hepatitis-A that often make people ill through contaminated food, SARS-COV-2 which causes COVID-19 is a virus that causes respiratory illness. Foodborne exposure to this virus is not known to be route of transmission, but ‘Precaution is better that cure’ and we should remember this, so that we must maintain safety and hygiene by following the paths of HACCP (Hazard Analysis And Critical Control Point), GMP(Good Manufacturing Practice) & GHP(Good Hygiene Practice). In this situation we have to follow 4C’s of Food Safety- Clean, Cover, Chill& Cross Contamination.

Some food safety measures should be maintained during this epidemic situation in every steps of food preparation, preservation or retailing-

Awareness of the Food Workers
Food industry personnel do not have the opportunity to work from home, they have to continue their duties from their workplace and they have to make a direct contact with food while preparing, preserving or packaging. So the food industry should have Food Safety and Management (FSMS) plan based on HACCP principles in place to manage food safety risks and prevent food contamination. Food establishment must maintain the protocols include Good Hygiene Practices (GHP), cleaning & sanitation of processing areas, supplier control, storage, distribution and transport, personal hygiene and fitness to work to maintain a hygienic food processing environment.

Managing Employee Health
Physical distancing is very important to slow the spread of COVID-19. All food business operator should follow the physical distancing guidelines. WHO guidelines are to maintain-at least 1m (3ft.) between fellow workers, they should not faced with each other. At this situation organization required to reduce production lines and limit the number of staffs in food preparation or processing area. The workers should maintain personal hygiene they must wash their hands for at least 20 seconds specially before eating, after going to washroom, after blowing nose or coughing or sneezing with soap and water & also used alcohol based hand sanitizer with at least 60% alcohol.

They should provided PPE such as face masks, hair cover, disposable gloves, clean overalls & work shoes for the staff. The use of PPE would be routine in high risk areas of food premises that produces ready to eat and cooked food. Staff who are feeling unwell should not
report to work and seek medical advice. If any employee become unwell with the symptoms of Covid-19 at workplace, he must be isolated from others immediately and send for home quarantine. All surfaces that the infected employed has come into contact with must be cleaned.

Managing Operations in Foodservice Establishment or Retail Food Store
Food establishment or retail food store must maintain food safety protocols and best practices –

- Wash, rinse and sanitize food contact surface dishware, utensils, food preparation surfaces & beverage equipment after use.
- Frequently clean & disinfect floors, counters.
- Wash and sanitize food contact surfaces like dishware, utensils, food preparation surfaces & beverage equipment after use.
- Food should be cooked at proper temperature.
- Hot foods are cooled rapidly for later use. Check temperature of food being cooled in refrigerator or by rapid cooling technique such as ice bath & cooling wind.
- The time foods being stored, displayed or delivered are held in the danger zone (between 41◦ F and 135◦F) is minimize.
- Discounting operations such as salad bars, buffets & beverage service stations that required customers to use common utensils or dispensers.

Managing Food Pickup and Delivery
Drivers and other staffs delivering to food premises should not leave their vehicles during delivery. Drivers should use a hand sanitizer before passing delivery documents to food premises staff.

Disposable containers and packaging should be used to avoid the need for cleaning.
Drivers need to be aware of physical distancing when picking up deliveries & passing deliveries to customers & of the need to maintain a high degree of personal cleanliness and to wear clean protective clothing.
Increase the frequency of cleaning & disinfecting of high touch surfaces such as counter top, touch pads and the vehicle by wiping down surfaces using regular household cleaning or spray.
Keep hot food hot and cold food cold by storing the appropriate transport vessels. Food should be wrapped properly and also raw foods separated from cooked and ready to eat food.

Conclusion
The food industry should have proper guidelines based on FSMS & HACCP. Food industry FSMS are underpinned by prerequisite program that include good hygiene practices, cleaning and sanitation, zoning of processing areas, supplier control, storage, distribution and transport, personnel hygiene & fitness to work. The codex general principles of food hygiene should be followed at each stage of the food processing, manufacture and marketing chain for the prevention of food contamination. Social distancing and hygiene maintenance is the key route of preventing COVID-19.

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