

Covid-19 Pandemic and Food Safety

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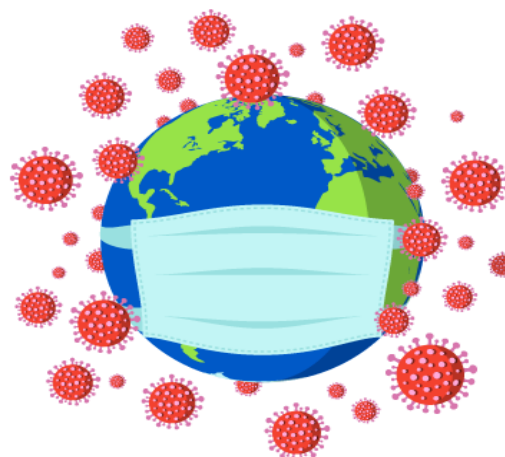
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SUMMARY

Corona virus disease caused by respiratory syndrome corona virus 2 (SARS- CoV- 2). It is a global pandemic disease called SARS-CoV-2 or COVID-19. A new strain from the Corona virus family having high infectivity, but low mortality. The risk associated with Novel COVID-19 in the food industry is low due to the regulatory and third party audit Good Manufacturing Practices (GMP) requirements that specifically address the exclusion of persons with any infectious disease from food processing environment. We should be comfort in the fact that our food supply continues to be safe and wholesome. Thus, COVID-19 is a respiratory illness and the transmission route is through person to person contact and through direct contact with respiratory droplets generated when an infected person coughs or sneezes.

INTRODUCTION

The novel Corona virus, global pandemic disease called SARS-CoV-2 (COVID-19). Corona virus disease caused by respiratory syndrome corona virus 2 (SARS- CoV- 2). It was first identified in December 2019 in Wuhan, Hubei, China and it is pandemic. This pandemic is reduced down the global economy to move at a snail's pace, but many of the larger economists are taking extra ordinary measures to drive the crises in to rapid recovery. The novel Corona virus (COVID-19) is affects most of the companies in India, either directly or indirectly. The COVID-19 pandemic has disrupted normal economic activity and life in our Nation. India is one of the world hubs of information technology services, causing respiratory illness in animals or humans. The disease affected 214 countries and territories around the world and all International conveyances. The battle with COVID-19 has already cost the lives more than 10 lacks.



Impact on Science:

COVID-19 pandemic disease also affected many sciences, space and technology institutions and Government agencies worldwide causing reduction in productivity on a number of fields and programmes, research work threatened by global ongoing pandemic where research work relies on personal laboratory work, treating patients and clinical trials. Some of the research operations are scale back to some extent for example collecting tissue, collecting blood for exploratory research studies are gone down. Diagnostic studies in new studies scaled back and therapeutic research still important has reduced. The situation testing flexibility of the community to cope up with present condition. The telemedicine have increased but still there is a need of better delivery of clinical trials. Scientist and Engineers are trying to invent new technologies in hopes of detecting and tracking COVID-19.

Impact on Mental Health of Students:

The pandemic not only created the world economic crisis but also risk created in the educational fields, we can see the long-term impact on children in terms of education outcomes, their emotional and mental health. The smart education is going on but not still 90% vulnerable students are facing the problems. Due to lack of facilities, this creates high risk of losing more young generation. Better education plans should be made by the Government. Here the big technological companies and social services need to work for connecting the isolated children/peoples in an order to support and look whether they are aware of the situation.

Food Safety

As per food safety specialist, Food and Agricultural Product center coordinator Mr. Ravi Jadeja marked his word as “The risk associated with Novel COVID-19 in the food industry is low due to the regulatory and third party audit Good Manufacturing Practices (GMP) requirements that specifically address the exclusion of persons with any infectious disease from food processing environment. Furthermore, the food scientist Dr. William McGlynn marked that we should be comfort in the fact that our food supply continues to be safe and wholesome. There is currently no evidence that people can catch COVID-19 from food or food packaging. Corona virus cannot grow on food, while bacteria under the right conditions can grow on food; a virus such as the one that causes COVID-19 requires a living host to multiply. Thus, COVID-19 is a respiratory illness and the transmission route is through person to person contact and through direct contact with respiratory droplets generated when an infected person coughs or sneezes.

Safety of food industry workers:

Food sector related industry workers do not have the opportunity to work from home and required to continue to work in their usual workplaces. Keeping all workers healthy and safe in the food manufacturing plant and food supply chain is critical to surviving the current pervasive. The food industry should have Food Safety Management Systems (FSMS) based on Hazard analyses and Critical Control Point (HACCP) principles in place to manage food safety risks and prevent food from any source of contamination. The Codex Alimentations Consortium (CAC) has published General Principles of Food Hygiene (GPFH) for the implementation of basic hygiene controls at each stage of the food manufacturing steps from farm to consumer without any contamination and food fraud. FAO and WHO have developed guidance for food safety authorities and FAO has provided policy guidance for various aspects of food safety and food security measures in the light of pandemic.

Nutrition and food safety (NFS):

A Robust and diverse food supply is an essential part of the health and nutrition response to COVID-19. World Health Organization(WHO) together with partners, is providing nutrition and food safety guidance and advice during (heightened awareness) COVID-19 pandemic for Government, food businesses, health workers and the general public to maintain good health and prevent malnutrition in all its forms.

Promoting safe food handling:

- 1.Keep clean.
- 2.Separate raw and cooked food.
- 3.Cook thoroughly.
- 4.Keep food at safe temperature.
- 5.Use safe water and raw materials.

Above five keys are very important, which should be developed to educate safe food handling behavior's to all consumers and food handlers. People get ill by eating unsafe food. While Food Safety is a shared responsibility, individual consumers and food handlers play a huge role in preventing such diseases.

Sterilization instructions during COVID-19:

- Corona viruses cannot multiply in food. They need live animal or human host to multiply and survive. They (COVID viruses) cannot live on surface of foods including fruits and vegetables, frozen foods, pre-packaged foods.

- Washing fruits and vegetables with potable water is not sufficient. It is recommended to follow the above five keys for safer food.
- Do not wash fruits and vegetables with liquid soaps, alcohols and spirits.
- It is not necessary to disinfect food packaging material, but hands should be properly washed after handling food packages and before eating.
- Corona viruses are not more resistant to heat than the usual viruses and bacteria found in food.
- Food thoroughly cooked to at least 70 degree Celsius.
- Good hygiene practice should be there.
- Handling food packaging is an unlikely cause of Covid-19.
- Under experimental conditions, the virus can survive on variety of surfaces such as plastic or cardboard used in packaging, but it is unlikely that this type of exposure would be sufficient to make a person sick.

Precautions at grocery shops:

Consumer should maintain a safe physical distance of at least one meter from all other shoppers and staff while queuing before entering the store and while shopping in the store. If trolley or basket is used while shopping, sanitize the handle before and after use. Hands should be sanitized before entering the shop. Practice good coughing/ sneezing etiquette while in the store. Avoid touching mouth, nose and eyes during shopping. Minimize direct hand contact with food by using available tongs and serving utensils. Use contact less for payment rather than direct transactions of cash/notes (where feasible).

- It is safe, if the provider follow personal and food hygiene practices. After accepting food/ grocery deliveries, hands should be washed with soap and water.
- It is safe to visit food markets where good manufacturing practices (GMP) and good hygiene practices (GHP) standards are maintained in the market.
- It is possible to maintain a safe physical distance of at least one meter.
- The best way to avoid covid-19 is through good hygiene habits.
- It is important to follow the measures put in place locally at the market or supermarket and do not shop if you have any symptoms.

Precautions at Home:

- It is safe, all should follow personal and food hygiene practices.
- For cleaning and disinfecting households with suspected or confirmed COVID-19 illness surface virucidal disinfectants such as 0.05% sodium hypochlorite and products based on ethanol (at least 70%) should be used.
- All equipment's, utensils and surfaces used for food preparation should be washed and sanitized.
- Always wash your hands with soap and water for at least 20 seconds and dry thoroughly with a clean towel after shopping before handling the Food and during preparation before eating and after using the bathroom.

Additional precautions:

- Always wash your hands after unpacking food.
- Wiping down and disinfecting surfaces with disinfectants.
- Avoid touching your eyes, nose or mouth when handling food and food packages.
- Wash reusable shopping bags.
- Continue to follow National Food Regulation Act 2006, as well as COVID-19 related measures to protect food.

CONCLUSION

Millions of deaths occur across the world due to this COVID-19 deadly outbreak across the globe and now huge cases were reported daily. In this wake of worst pandemic FSSAI issued notification letter for the consumer, food business owner and stakeholders to ensure the safety by following above precautions and major steps of Food Safety Management System (FSMS) & it's part of Hazard Analysis and Critical Control Point (HACCP) with complete pre requisite programs as guided to overcome the spreading of highly transmitted

contagious virus. National Action Plan (NAP) has been established first time for eradication of corona virus. The success of that plan depends on very well coordinated approach at National, provincial and regional levels. True dedication of health workers, nurses, doctors and scientists; perfect planning and ideal monitoring assessment gives an amazing results.

REFERENCES

- Anonymous.2020.Impacts of COVID-19 on the food industry. <https://www.qualityassurancemag.com>
- Anonymous. 2020.Timeline: Impacts of COVID-19 on the global food industry. Ingredients Network.
<https://www.ingredientsnetwork.com>
- FAO.2020. COVID-19 pandemic- impact on food and agriculture.[https://www.Fao.org/2019-ncov/q-and-a/impact-on-food and agriculture/en/](https://www.Fao.org/2019-ncov/q-and-a/impact-on-food-and-agriculture/en/)
- Poppick.,L. 2020.The effects of COVID-19 will ripple through food systems.
<https://www.scientificamerican.com>
- WHO. 2020. Corona virus disease 2019 (COVID-19): situation report, 72
- WHO. 2020. COVID-19 and food safety: guidance for food businesses: interim guidance 07 April, 2020 (No.WHO/2019-nCoV/Food Safety/2020)