Shahbaz et al. | J Pure Appl Microbiol | 16(1):1-2 | March 2022
Article 7538 | https://doi.org/10.22207/JPAM.16.1.24
Published Online February 10, 2022
Print ISSN: 0973-7510; E-ISSN: 2581-690X

EDITORIAL OPEN ACCESS

Food Safety Control Measures to Address Emerging Omicron SARS-CoV-2 Variant of Concern

Muhammad Shahbaz[1]*, Muhammad Bilal[2] and Hafiz M.N. Iqbal[3]

[1]Mawarid Food Company, Al Wizarat, Riyadh 12622, Saudi Arabia.
[2]School of Life Science and Food Engineering, Huaiyin Institute of Technology, Huaian 223003, China.
[3]Tecnologico de Monterrey, School of Engineering and Sciences, Monterrey, 64849, Mexico.

Summary

The recent emergence of the novel Omicron SARS-CoV-2 Variant, first detected in Gauteng Province of South Africa in mid-November 2021, has become a global concern. Several countries witnessed rapid transmission of omicron in the past months. This variant can increase the rate of virus transmission, risk of reinfection and enable omicron to continue its spread in the community. There is no evidence that COVID-19 can spread through food, and people can catch up with this virus through food materials. This virus can not survive and multiple on the surfaces of food packaging. The main routes of this virus transmission and spread may be during close contact and directly from an infected person to a healthy person.

Touching a contaminated surface and objects such as doorknobs, table surfaces, everyday use equipment, touching screens and shaking hands and then touching the mouth, nose, or eyes may also be a source of infection.[1] Recent research reported that the COVID-19 virus could survive and remain viable on plastics for up to 72 hours, 4 hours on stainless steel and copper and up to 24 hours on cardboard. Since the food sector has complex processing and manufacturing processes with a series of operational steps, starting from food intake, receiving, preparation, production, processing, packaging, storage and delivery to market and customers. At each stage, food handlers are directly involved, there is a more likelihood of food handlers touching the food or food surfaces directly. In this case, food workers are not following proper food safety control and protective actions, e.g., hand washings, cleaning and disinfection, sanitization, and social distancing. If not vaccinated, it can be a possible source of omicron transmission.

To prevent the potential transmission of emerging Omicron SARS-COV-2 Variant of Concern, the food sector should ensure compliance with food safety control measures and prerequisites to safe and protect food workers from omicron variants to mitigate the risks of transmission of the virus by adopting good hygienic practices (GHPs), good manufacturing practices (GMPs), appropriate cleaning and disinfection by approved chemicals and sanitizers to endure the production and consistent stream of safe food. Since all the food

***Correspondence:** shahbazfoodtech@gmail.com

(Received: January 9, 2022; Accepted: January 31, 2022)

Citation: Shahbaz M, Bilal M, Iqbal HMN. Food Safety Control Measures to Address Emerging Omicron SARS-CoV-2 Variant of Concern. *J Pure Appl Microbiol.* 2022;16(1):1-2. doi: 10.22207/JPAM.16.1.24

workers may well be aware of the precaution's measures, it is still needed to refresh their information. The staff working in food premises should be provided with frequent refresher training, proper personal protective equipment (PPEs), and written instructions on how to contain the transmission of Omicron and COVID-19 variants.[2]

One of the most critical steps to restrict the spread and transmission of the COVID-19 during food service processes is to wash and sanitize frequently. Frequent hand washing should be obligatory for Food workers directly involved in food production and preparation activities. The staff should avoid touching the food contact surfaces of tables, utensils, small wares, cutting boards and knives and surfaces of food menu, kiosks, dispensers, door handles, freezers and cooler handles, tablets, computers and equipment controller surfaces, buttons, and touchpads. There is a possibility that the virus can transfer from unwashed hands to other cleaned and sanitized surfaces during food production, preparations, cooking, storage, serving to customers and then moving to other food staff and eventually to customers. Frequent disinfection and sanitization with approved sanitizer to reduce the microorganism's loads to a safe level determined by food safety authorities and public health codes are crucial to mitigating the risk of virus transmission.

Social distancing to keep a space of at least 2 meters during operation hours at food premises to limit the close staff contacts inside food preparation and production areas is critically important to limit the spread.[2] It is also recommended by CDC and other food safety authorities. The staff Should avoid unnecessary gatherings and crowds during shift changes, breaks and staff training. The food premises should optimize the number of food workers to occupy maximum capacity at food premises and ensure fewer food workers are available than normal staff to a smaller amount of COVID-19 transmission risks.[3,4] The food facilities should also provide appropriate personnel protective equipments (PPEs) for staff while receiving incoming materials and during deliveries, which can enhance the staff protection from the virus. Finally, the food amenities should look for staff health and monitor the visitors, suppliers, and contractors to recognize any sick person, maximize protection, and report to related health authorities if someone's symptoms are identical to emerging COVID-19 omicron variant concern.

ACKNOWLEDGMENTS

The authors are thankful to their representative universities/institutes for providing the related support to compile this work.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORS' CONTRIBUTION

All authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

FUNDING

None.

DATA AVAILABILITY

Not applicable.

ETHICS STATEMENT

This article does not contain any studies with human participants or animals performed by any of the authors.

REFERENCES

1. Shahbaz M, Bilal M, Akhlaq M, Moiz A, Zubair S, Iqbal HMN. Strategic measures for food processing and manufacturing facilities to combat coronavirus pandemic (COVID-19). *J Pure Appl Microbiol.* 2020;14(2):1087-1094. doi: 10.22207/JPAM.14.2.01
2. Shahbaz M, Bilal M, Moiz A, Zubair S, Iqbal HMN. Food safety and COVID-19: precautionary measures to limit the spread of coronavirus at food service and retail sector. *J Pure Appl Microbiol.* 2020;14(suppl 1):749-756. doi: 10.22207/JPAM.14.SPL1.12
3. WHO. Coronavirus disease (COVID-19): Food safety and nutrition. https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-covid-19-food-safety-and-nutrition. Accessed January 7, 2022.
4. Food Standards. Novel Coronavirus and Food Safety. 2021. https://www.foodstandards.gov.au/consumer/safety/Pages/NOVEL-CORONAVIRUS-AND-FOOD-SAFETY.aspx. Accessed January 7, 2022.