## Editorial

## Food Safety in the Era of COVID-19 Pandemic

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Food safety is an important determinant for public health and nutrition. So, access to safe and nutritious food is a key to promote and protect good health including boosting body immunity, which is more important during disease conditions COVID-19.1 Food ingredients and including bioactive compounds supporting immune functions in humans, such as vitamin D, polyphenols and flavonoids have also been in research focus in terms of both preventing and treating Covid-19.2 Coronavirus disease (COVID-19) is an infectious disease caused by the recently discovered coronavirus SARS-CoV-2 that usually cause respiratory illness. It was unknown before the outbreak began in Wuhan, China, in December 2019. On the 11<sup>th</sup> March 2020, the World Health Organization (WHO) has declared it a pandemic.<sup>3</sup>

Food security, food safety and food sustainability are recognised as strongly affected dimensions of food systems during the Covid-19 pandemic.<sup>4</sup>

Primarily, coronavirus SARS-CoV-2 spreads from person to person through small droplets of saliva or discharge from the nose, when an infected person coughs sneezes or exhales. Till date, there is no evidence that suggests that COVID-19 is transmitted through food. Coronaviruses have poor survivability on surfaces, such as food products or packaging materials. <sup>5</sup> It is important to mention that the first COVID-19 cases were officially linked to the Wuhan's seafood market selling exotic/wild animals.<sup>6</sup> However, concerns were expressed about the potential for these viruses to persist on raw foods of animal origin.

Current evidence on other coronavirus strains shows that while coronaviruses appear to be stable at low and freezing temperatures for a certain period, food hygiene and good food safety practices can prevent their transmission through food. To support the food supply chain, the WHO, FAO of UN and other international bodies have developed guidance documents both for the food businesses and the national competent authorities.<sup>7,8</sup> Furthermore, Codex Alimentarius Commission and other organizations have developed and or updated guidelines in context of covid pandemic.

Assurance of food safety is a shared responsibility, though the primary responsibilities lie with the producers. The authority of each food business or facility or food industry should make sure that all staff are aware of the COVID-19 situation and taken it seriously; staff are well trained to meet health and hygiene requirements; effectively supervise all areas where food is exposed to ensure it is not contaminated, or removed if it is contaminated (or suspected to be), and should maintain the social distancing. If a food handler is unwell s/he should not be in work. In the current COVID-19 situation, the food handlers or workers on farms, and in food production, processing, and retail settings who do not typically wear masks as part of their jobs, it is recommended to wear surgical face mask. With limited exceptions, employees may not contact exposed, ready-to-eat foods with their bare hands and shall use suitable utensils such as deli tissue, spatulas, tongs, single use-gloves, or dispensing equipment. Gloves are not a substitute for hand washing or hand hygiene. If food handler's task requires direct contact with ready-to-eat food, s/he should wash hands and the exposed portions of arms for 20 seconds prior to wearing gloves and before touching food or foodcontact surfaces; wash hands immediately after removing gloves.

Role of consumers in this regard is the most important. The best way to prevent the infection is to avoid being exposed to the coronavirus, practicing most important public health measures including washing hands or using alcohol-based sanitiser; maintaining respiratory hygiene and social distance;

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## Rahman SMM et al

using face mask when going outside and following other measures as instructed by the health authority.

Competent authorities should continue to deliver services critical to ensuring safety and integrity of the national food supply and trades, including high-risk inspection of food businesses, communication with key stakeholders including international partners, public health department and others. Furthermore, health of the food safety inspectors must be protected and they should be trained to prevent and control the virus transmission. 9 In addition, food testing should be limited to high priority samples including samples of outbreak or food safety emergencies.

Misinformation regarding COVID including food is one of the most important issues in this pandemic situation. Misinformation or inaccurate information spread quickly through the social and electronic media, which may deteriorate the consumers' confidence. Hence, it is the utmost necessity to equip the consumers with proper, accurate and scientific information to prevent and control the transmission.

In addition to implement food safety management, it is needed to place at the top- the behavioural change communication and food safety culture approach to assure safe and quality food.

No doubt, food security, food safety and nutrition are closely interlinked, which is the utmost necessity to achieve the zero hunger, within the framework of the sustainable development goals. So, in the period of the COVID-19 pandemic, all the stakeholders along the food chain should be extra vigilant and work together, not only for safe food but also for lives and livelihoods

## References

- 1. Rahman SMM. Coronavirus (Covid-19) and food safety. The Financial Express. Dhaka. 18 April. 2020.
- Galanakis CM, Aldawoud TMS, Rizou M, Rowan NJ, Ibrahim SA. Food Ingredients and Active Compounds against the Coronavirus Disease (COVID-19) Pandemic: A Comprehensive Review. Foods. 2020; 9:1701. https://doi.org/10.3390/foods 9111701
- Galanakis CM. The food systems in the era of the Coronavirus (COVID-19) pandemic crisis. *Foods*. 2020; 9:523. https://doi.org/10.3390/foods9040523
- Rahman SMM, Akter A, Mostary KF, Ferdousi S, Ummon IJ, Naafi SM et al. Assessment of knowledge, attitudes and practices towards prevention of coronavirus disease (COVID-19) among Bangladeshi population. Bangladesh Med Counc Bull. 2020;46:73-82.
- CDC. Food safety and coronavirus disease 2019 (COVID-19),2020. https://www.cdc.gov/foodsafety/ newsletter/ foodsafety-and-Coronavirus.html.
- Ceylan Z, Meral R, Cetinkaya T. Relevance of SARS-CoV-2 in food safety and food hygiene: Potential preventive measures, suggestions and nanotechnological approaches. Virus Disease. 2020; 31:154–160.
- 7. WHO. COVID-19 and food safety: Guidance for food businesses. April 07, 2020. World Health Organization, Geneva.
- FAO & WHO. COVID-19 and Food Safety: Guidance for competent authorities responsible for national food safety control systems. April 22, 2020. Food and Agriculture Organization of the United Nations, Rome, Italy. World Health Organization, Geneva.
- FAO. 10 things: Food safety authorities should know about food safety and COVID-19. www.fao.org

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