Commentary

Sino-EU Intergovernmental Collaboration in the Campaign Against the COVID-19 Pandemic on Food via EU-China-Safe Framework

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The coronavirus disease 2019 (COVID-19) pandemic has swept across the planet with more than 81 million confirmed cases and deaths surpassing 1.8 million in over 222 countries (1). Since the first outbreak found in Wuhan in late December 2019, the capital city in Hubei Province of China, healthcare workers and scientists having been working relentlessly to fight against this invisible enemy. It is very clear that starting from nowhere, our Chinese colleagues have made tremendous contributions to the knowledge of the virus and have shared among their counterparts globally (2–4). There is little doubt that this knowledge has been of substantial support to the rest of world to initiate mitigation strategies and undertake vaccine development. The state government acted quickly by following scientific advice and put into place a coherent control plan. All the available evidence points to China having successfully contained and controlled domestic cases of the virus within a few months of the original outbreak.

There was no early evidence from monitoring data based on whole genome sequencing and RNA testing (5) to show the transmission of COVID-19 virus could occur via food. However, there was a growing body of knowledge to suggest that the virus could have a longer survival time at lower temperatures (6). When the new regional outbreak occurred in Xinfadi and was linked to the wholesale market that serves Beijing, positive COVID-19 RNA results were found on food samples that the association between virus spread and food became apparent (7). Subsequently, transmission of the virus was also linked to Dalian (8), Qingdao (9) and Tianjin (10) harbor workers who, in all likelihood, became infected due to contact with frozen food and its packaging. The isolation of live virus in the Qingdao case study have further confirmed the transmissibility from food packaging to humans (11). In response to this mounting scientific evidence, the Chinese government issued a series of 8 updated notifications/guidelines (12–19) since June 2020 (More insights could be found on the newly released

Policy Note) (20) to enhance the monitoring and regulations and cover the whole refrigerated food supply chain in China from entry into the country to entry into the markets.

The highly important and ambitious EU-China Intergovernmental Horizon 2020 EU-China-Safe program was jointly founded by the Chinese Ministry of Science and Technology (grant no 2017YFE0110800) and the European Commission (H2020 grant no727846). The purpose of this four-year (2017–2021) flagship research project is to establish an efficient, trusted, and robust network of scientists between the two regulatory systems. The project has aimed to deliver mutually recognized information sharing systems and knowledge transfer systems and harmonized testing methods in both food safety and authenticity spheres. The project has been running for three years and has been externally reviewed by both Chinese and European scientists, and the evaluations have been extremely positive. Since the beginning of this pandemic, members of the network in China and the EU have been actively involved in the efforts to control the virus. With an excellent degree of collaborations already in place, the ability to share knowledge and information has been achieved in a very fast and smooth manner. For example, protocols for sampling and analysis have been shared via the ‘virtual laboratory’ established at the outset of the project. All this information is being made available on the EU-China-Safe website (<http://euchinasafe.eu>) to help further disseminate the combined China and EU protocols. This project is exemplary of what can be achieved when the very best scientists from China and the EU have the means to work together and help develop high impact solutions to complex problems.

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