may not have a specific tailored treatment option, there would need to be thought into how these patients are cared for, what treatment can be offered. A treatment may be profiled to work and it just doesn't, or the side effects are more severe than anticipated and this may be more devastating to the patient.

We must also consider that not all patients want to engage with their treatment or discuss their prognosis. Some patients want to know everything to help them feel in control, others only want to know things if and when they really need to. When implementing precision medicine, we must not forget the patient voice and their wishes and preferences. For some patients, the right treatment and care is not the most effective but the one that lets them live the life they want.

Myeloma patients are losing out twice as science progresses. Lower patient numbers mean myeloma patients aren't a priority in developing precision medicine or for inclusion in larger research driven clinical initiatives. This double blow means that not only is myeloma patient data not being routinely collected to provide more knowledge to drive drug discovery or diagnostic screening tests; they are also not included on programmes which might offer them more options, like the genomic medicine hubs. Issues around data use needs to be transparent and we simply need more research into leveraging the potential of genomic medicine for myeloma.

Genomic testing and precision medicine would be life changing for myeloma patients. Having biologically matched treatments could add years of good quality life and from the patient perspective, then can stop thinking about what will happen when their myeloma comes back and they would have hopeful futures.

TRANSLATING COVID-19 CHALLENGES INTO PRACTICAL GUIDANCE FOR THE FOOD SECTOR



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Institute of Food Science and Technology (IFST) is the UK's leading professional body for those involved in all aspects of food science and technology.

Our core aim is to promote the advancement and application of food science and technology for the benefit, safety and health of the public.

Access to safe, nutritious and affordable food is critical to UK national security. In the current COVID-19 pandemic, food has not been identified as a likely source or route of transmission of the SARS-CoV-2 virus. However, the food system is being impacted both economically and socially, across the entire food chain, in relation to: human resources, such as changes in key personnel; supply chains of ingredients, packaging, finished products and equipment; sourcing as manufacturers may need to rely on alternative suppliers at short notice; and transportation of people, materials and goods.

These wide-ranging impacts were, and still are, occurring concurrently with consumers buying additional food and other consumer goods and supplies through retail channels to cope with the pandemic and consequences of lockdown.

The resilience of the food system, and food business operators within it, and its capability to supply food to meet the needs of the UK population relies upon complex interdependencies and upon competent food technical professionals involved in keeping food systems operations working safely, even when at full capacity. The work and expertise of food technical professionals are especially of value when it comes to adapting successfully to changing circumstances without compromising quality or safety.

The publication by the FSA of the quantitative risk assessment relating to SARS-CoV-2 and food was well-timed and helped Food Business Operators (FBOs) to ensure they were taking the right steps to manage any potential food safety risks relating to COVID-19. The activities and reports issued by the Parliamentary Office of Science and Technology (POST) on COVID- 19 from March 2020 onwards have also been of value in providing background context. Guidance from Food Standards Scotland took a sectoral approach to food, addressing food safety and the operational impacts of the pandemic alongside public health implications. This was beneficial to all food businesses operating across the UK as it looked at the issues operators in the food system were having to deal with in the round.

In contrast, early in the pandemic, there appeared to be a lack of focus by UK government on food and the needs of the food system to support continued national food security and supply. The advice given in England and Wales was more departmentally segmented forcing FBOs to visit multiple websites seeking out either healthcare sector-related advice or generic advice and drawing their conclusions on how best to apply this advice in the food sector. This did not recognise that all players in the food system have their own unique food safety challenges and duty of care that is impacted on by any change within the working environment. Large operators have their own in-house teams to manage this often-conflicting risk; smaller businesses were left more vulnerable.

Over 95% of the UK's 7,400 food and drink manufacturing businesses are SMEs (small and medium sized enterprises) who rely on their Local Authority's Environmental Health Officers (EHOs) for food hygiene and food safety advice and guidance. This local authority EHO resource is constrained within normal operations and this capacity challenge became critical for engagement with food operations on the ground as EHOs stepped up into their broader public health roles. The COVID-19 pandemic has

highlighted that there is no alternative route to get to FBO SMEs and provide them with supporting holistic advice in a time of rapid change.

In order to provide supportive and timely guidance for our food professionals and the wider food system, IFST set up a COVID-19 Advisory Group comprised of experienced professional members to monitor and translate the emerging state of knowledge for the food system relating to COVID-19. This group created and collated resources to proactively reinforce best practices, especially hygiene practices; guide food business through re-purposing and closure/re-opening; and signpost to trusted resources from authoritative bodies. These resources were made available on a freely accessible IFST COVID-19 Knowledge Hub https://www.ifst.org/resourcespolicy/covid-19-knowledge-hub.

IFST was able to leverage its professional members' in-depth knowledge of the food system and their insights into the specific technical challenges arising from COVID-19 to notify Governments of issues needing to be addressed in order to achieve effective public health measures whilst ensuring continued capable food safety and hygiene controls. IFST also requested specific food sector related advice from public health bodies, given the unique food hygiene operating environment compared to other manufacturing sectors. Our resulting positive engagement as a professional body provided independent technical professional inputs and oversight for Governments as they worked through creating guidelines and tools for the food sector.

An earlier approach that dealt with sectors of economic activity as opposed to advice that was aligned by government departmental responsibilities would have benefited the food system and other sectors. Advice from BEIS OPSS for food service businesses has now been developed and updated as issues arose and the need for food sector guidance recognised. More recently, the 'Here to Help' campaign by FSA late this summer is now providing helpful resources.

The scale of the food supply chain and its importance to the daily lives of millions in the UK is reflected in the number of government departments and agencies that have responsibilities and legitimate interest and involvement with the food supply chain. The intricacies and duplication of responsibilities across UK and devolved nations' government bodies complicates and confounds engagement and communication. A greater focus and more proactive alignment on food and the food system across the whole of UK government, including the devolved nations is, in our view needed, especially regarding strategy and resilience, regulatory approaches taken, best practices developed and guidance provided. There is a critical need for responsive and coordinated engagement across all stakeholders in the food system to create shared and comprehensive understanding of the food system and an environment of common endeavour not only in times such as these, but also on-going.

IFST fundamentally believes that professional bodies can play a key role in facilitating the translation of new developments for practitioners and policy makers by applying the expertise and experience of our professional members. We would therefore urge all government departments to recognise and make best use of the independent and expert resources available to them – especially in times of crisis.

IFST COVID-19 KNOWLEDGE HUB

https://www.ifst.org/resourcespolicy/covid-19-knowledge-hub

