From cell-based steaks to algae shakes, foods of the future are developing novel ways to replace meat. First, however, these sustainable proteins must be judged safe to eat. This is the idea behind a research hub launched at Nanyang Technological University (NTU) yesterday.

“Food safety, no food security,” said Professor William Chen, director of the university’s Food Science and Technology programme. The new Future Ready Food Safety Hub will support local and overseas agri-food firms by studying new ways to assess food safety risks in novel foods, while keeping abreast of newer forms of food.

To help the companies get their products approved and on grocery shelves and menus sooner, scientists at the hub are developing protocols for novel foods, ingredients and food processing techniques.

Prof Chen, who will be the principal investigator for NTU at the hub, said that no risk assessment framework has been set up so far in Singapore to evaluate the safety of many novel foods that are emerging. “In building out food security, more and more novel foods from the urban areas would emerge, from land-based aquaculture to cultivated meat. It is therefore important to have a framework before the foods are on consumers’ plates,” he said.

For instance, the hub will conduct tests to figure out if it is safe to store alternative proteins in biodegradable packaging made from prawn shells.

Prof Chen said food-tech companies can reach out to the hub for consultancy work and research collaborations, and to prepare for regulatory assessments.

The hub was established in collaboration with NTU, the Singapore Food Agency (SFA) and the Agency for Science, Technology and Research (A*Star).

It was launched by Minister for Sustainability and the Environment Grace Fu yesterday, at the opening ceremony of NTU’s inaugural Food Science and Technology Global 2021 conference.

Ms Fu said: “When it became clear to us that novel foods such as cultured meat could be an emerging growth area, SFA started engaging the scientific community and industry on the possible approaches to regulate the safety of novel foods and ingredients.”

In 2019, SFA introduced a novel food regulatory framework, which requires companies to go through a pre-market safety assessment for food products that did not have a history of being eaten as food.

The agri-food sector burgeoned in 2019, as Singapore set out its “30 by 30” goal to produce 30 per cent of its nutritional needs by 2030. Enterprise Singapore said that over the past two years, more than 15 alternative protein startups have set up base in Singapore.

The hub will also act as a bridge between firms and consumers to raise awareness about and increase receptiveness to novel foods by holding outreach programmes.

Minister for Sustainability and the Environment Grace Fu (third from right) at the launch of the Future Ready Food Safety Hub yesterday, with (from left) Singapore Food Agency (SFA) chairman Lim Chuan Poh, SFA chief executive Lim Kok Thai, A*Star chairman Chan Lai Fung, A*Star chief executive Frederick Chew, Nanyang Technological University (NTU) senior vice-president of research Tan Bin Yung and NTU president Subra Suresh. ST PHOTO: NG SOR LUAN

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