

# BT Lifestyle

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Long underrated, 6 artists finally get the spotlight ARTS/14 Tudor Black Bay gets bigger and better WATCHES/15 Good value Japanese menus at Fukui DINING OUT/16



Far left: Karana's whole-plant meat. With climate change affecting food production, plant-based products will continue to grow. Left: Buttermilk Fried TINDLE Burger. The non-GMO product has no hormones, antibiotics, or cholesterol. PHOTOS: KARANA, TINDLE



Mr Vijay: "Sustainability, hygiene and nutrition are some of the most urgent priorities in our food supply chain. The world has recently experienced a slew of epidemics and pandemics borne out of the over-reliance on the meat industry. Adopting alternative proteins is critical to reduce this reliance." HerbVore's Pea Paneer (soft cheese) is made primarily with pea protein from Canada. PHOTOS: AGROCORP, HERBYVORE

## The new 'protein' diet

Singapore plays a crucial role in the burgeoning alternative protein landscape. Find out who the main players are and what's next on the menu. BY JO CHUNG

**I**N the last few years, we've seen the rise of juicy, bloody hamburger patties made not by your favourite burger purveyor but the likes of Impossible Foods and Beyond Meats – the first companies to take us on the journey of plant-based 'meat'. While they were hailed for their uncanny resemblance to, and – arguably – taste of the real thing, other alternative protein players have since emerged. Since early 2021, a host of innovative plant-based food products have been rolled out by various food tech companies; a large number of them are based in Singapore.

### Jostling for market share

The global plant-based protein market size in 2020 was US\$10.3 billion (S\$13.6 billion) in 2020. This is projected to grow to US\$14.5 billion by 2025, according to ReportLinker, a market research group. With such projections, producers are jostling with each other to unveil their latest innovation.

In January 2021, Singapore startup Karana launched its new product – pork made from young jackfruit – and is marketing it as the first whole plant-based 'meat' product manufactured in Singapore. In March, Next Gen Foods launched TINDLE 'chicken' made from plants (main ingredients include water, soy, sunflower oil, and coconut fat).

Singapore-headquartered supply chain company Agrocrop also launched its plant-based foods brand, HerbVore, in April. Its first product, Pea Paneer (soft cheese), is made primarily with pea protein from Canada. The company also specialises in agricultural commodities and food products such as wheat, soybeans, pulses, nuts, and rice.

From April 20, San Francisco-based Eat Just partnered with foodpanda to roll out for the first time, home delivery of GOOD Meat cultured chicken. It obtained approval to sell lab-grown chicken in Singapore in December 2020, and now offers boxed meals for delivery to selected areas.

In the restaurant scene, Tokyo-based food tech startup Next Meats, which fo-

cuses on Japanese-style alternative meat products, recently launched its plant-based yakiniku at Singapore's Aburi-EN, a casual Japanese grill restaurant chain. Its *kalbi* (boneless short rib) is made with soybean proteins, sans chemical additives. For dessert, there's all-natural vegan ice cream by Kind Kones, originally from Malaysia. And, by 2022, homegrown startup Float Foods expects to have people frying sunny-side up, plant-based 'eggs'.

Cell-based or cultured meat producers are also expected to move out of R&D phase and commercialise in the near future. By 2022, cell-based meat company Shiok Meats plans to roll out "delicious, clean, sustainable, and healthy" shrimp, crab and lobster, by harvesting crustacean cells grown in nutrient-rich conditions. Likewise, Singapore- and San Francisco-based biotech startup TurtleTree Labs is the world's first company to use a cell-based method to create milk and milk components.

### The case for plant-based food

Singapore's "30 by 30" goal of producing 30 per cent of the country's food needs by 2030 is top of mind for locally-based food tech companies. Food security concerns caused by the pandemic have also created a sense of urgency to embrace alternative proteins.

"Sustainability, hygiene and nutrition are some of the most urgent priorities in our food supply chain," says Vishal Vijay, Agrocrop's director of strategic investment. "The world has recently experienced a slew of epidemics and pandemics borne out of the over-reliance on the meat industry. Adopting alternative proteins is critical to reduce this reliance."

Karana co-founder Daniel Riegler concurs. "The growing awareness of the impact of industrial animal agriculture on our environment, human health, social justice issues, and of course animal wel-

fare means that interest in plant-based products will continue to grow, but the reality is we don't have a choice. Climate change is already impacting food production; weather patterns are changing, water resources are limited, and soil conditions are worsening. We have become very used to eating whatever we want whenever we want but that is really not sustainable even in the mid-term so if we are not able to moderate how we consume, nature will do it for us."

Float Foods' CEO Vinita Choolani adds: "We consume two billion eggs annually in Singapore. There is no reason why we cannot complement the local egg supply with nutrient-dense, plant-based eggs that taste, smell and look like chicken eggs. This way, we give consumers the choice – whether to eat chicken eggs or opt for substitutes where they can't really tell the difference. We want to be able to meet consumer's expectations where they can continue to enjoy their favourite food experience even when choosing to go plant-based."

But between plant-based and cell-based, Andrew Ive, founder of Big Idea Ventures (BIV), hybrid venture firm with an accelerator programme in Singapore and New York, picks the latter as the longer-term solution. BIV invested in inventive plant-based and cell-based alternative proteins for its first fund, of US\$50 million (the New Protein Fund was rolled out in 2019). They include Singapore's Shiok Meats and Karana.

"In Singapore, 95 per cent of the food consumed every day is imported. In a crisis like Covid or worse, it won't take long for Singapore's neighbours to close the borders," says Mr Ive. "The answer in the long term is cell because for plant-based you still need the inputs. You need the core ingredient like pea protein or wheat, and you need to get them from outside. And, if you can't get the ingredient, plant-based isn't going to work either."

### Singapore's role

Singapore has been a magnet for food tech companies. Mr Ive says that, when given a choice, many of the companies they've invested in want to build their headquarters in Singapore.

"The Singapore government is very supportive of food innovation and improving food security. They have a long-term plan, and they are prepared to invest and bring the right people together. They have an ecosystem approach – and encourage its development. We appreciate being right in the middle of this ecosystem," he adds.

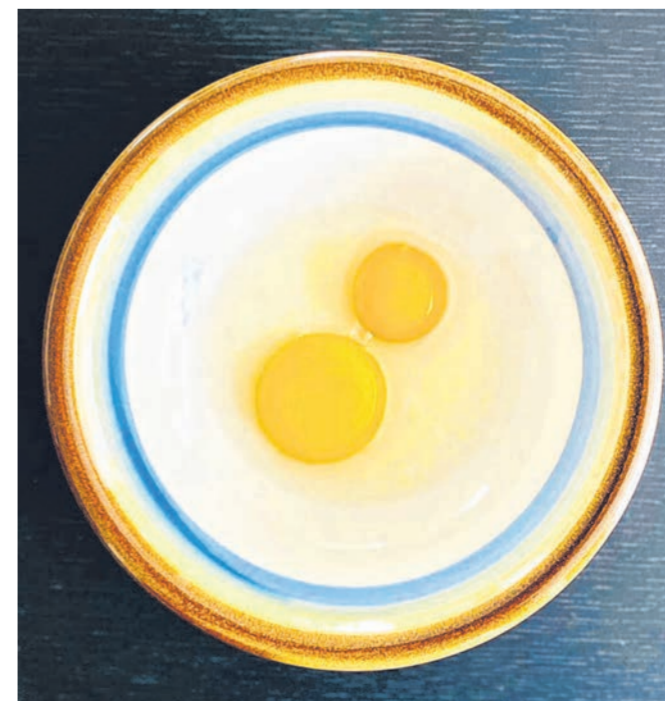
Mr Riegler also believes that given the level of IP protection, the business climate, and the addressable market in Asia-Pacific, Singapore should become a major player. "Especially as larger food companies continue to invest here and the resources available to startups increase."

### What's good about alt-proteins

While the jury is still out about how healthy these 'mock' meats compared to eating whole foods, food tech companies insist that their products contain all the nutrients you need.

Jean Madden, Next Gen's chief marketing officer, says: "Plant-based meats are no longer a niche. It is now embraced by the mainstream meat lover and flexitarian." She adds: "From a nutritional standpoint, TINDLE is made with only nine ingredients – delivering 17g of protein per 100g." The non-GMO product has no hormones, antibiotics, or cholesterol. TINDLE has also been certified by the Health Promotion board as a healthier choice option, containing less saturated fat and sodium than other plant-based alternatives.

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Ms Choolani: Nutrient-dense, plant-based eggs that taste, smell and look like chicken eggs. Float Foods' egg (top) and chicken egg (bottom). PHOTOS: FLOAT FOODS