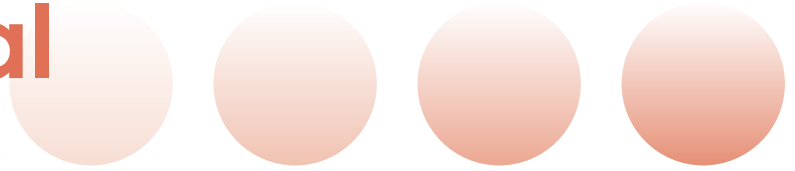


Liquid appeal

Plant protein beverages



Plant protein is growing its following, fuelling innovation in the beverage aisle and beyond. FoodBev's Antonia Garrett Peel caught up with the ingredient companies on hand to provide our next plant protein fix.

As demand for plant-based products has surged in markets globally, the plant protein sector has developed apace – propelled by innovation in extraction and processing technologies, and big investment.

“Consumers are becoming more aware of the resources needed to make animal-based products; with plant-based products, we're able to offer a reduction in CO₂ emissions, water and land usage,” said Elana Schwartz, national sales manager at Scoular.

Indeed, the numbers put forward by leading plant protein players paint a compelling picture. Israeli food tech firm InnovoPro claims that producing 1kg of chickpea protein, compared to an equivalent mass of animal protein, uses 163 times less arable land and 74 times less CO₂.

Innovopro's CEO, Taly Nechushtan, also identifies a global rise in food allergies as a factor driving

demand for “substitutes that are made with nonallergenic plant-based protein”.

Meanwhile, there has been widespread discussion of the impact of the coronavirus pandemic on consumers' approach to their personal health. As immunity-support claims pepper the offerings of functional beverage brands, rising health consciousness could be good news for the plant protein market too, as the health ‘halo’ consumers attach to plant-based diets is often a major factor driving uptake.

George Perujo, director product management specialty ingredients, EMEA at ADM explained: “Beverages specifically are well suited to health- and wellness-minded consumers, in part, because they can offer excellent nutrition content in a convenient, portable format”.

Fit for purpose

“The health, sports and fitness space has always been the 600lb gorilla in the market with regards to protein beverages,” said Peter van Dijken, who co-founded ingredients company Green Boy Group in 2016 with Frederik Otten.

And plant proteins found a home here, Scoular's Schwartz explained, at a time when challenges around flavour still stymied their adoption in other categories.

“In the past, plant proteins were relegated towards sports nutrition because taste isn't as important as nutrition in that category,” said Schwartz.

“Now, with the improvements that we have seen in taste and functionality, we're seeing a large range of new plant-based beverages – from milks to creamers to mainstream smoothies.”

Indeed, consumers thirsty for a plant protein boost will no longer find themselves short of options as an array of beverages have appeared on shelves in recent years powered variously by grains, legumes and other seeds.



Sarit Goffen



Among these, UK start-up Grounded's plant-based protein milkshakes hit the market this September billed as a clean disruptor in the ready-to-drink protein space. 2020 also saw Keytone Dairy strike out into the plant-based shakes category with its new Tonik Plant offering – featuring protein from pea and brown rice – and Bolthouse Farms made a bid for the keto audience with a new line of tailored pea protein drinks.

"We anticipate growth of functional yogurt-type beverages made with plant protein," said ADM's Perujo, who also tips "nutrient-dense" plant-based milk alternatives for growing focus in the coming year.

Meanwhile, brands such as Else Nutrition – behind the launch of a 100% plant-based protein infant formula in the US earlier this year – are carving out a niche for themselves in previously largely unexplored terrain.

Making the right choice

Soy has long since established itself as the behemoth of the plant protein market. However, its ascendancy has been challenged by a swelling number of plant-based variants.

Van Dijken – whose company Green Boy counts protein from pea, mung bean, fava bean and chickpea among its offerings for beverages – told FoodBev that solubility, taste and other aspects of functionality can all vary between different plant-based proteins.

ADM's Perujo added: "Knowing when, how and where to leverage the right proteins, protein blends and flavour technologies is key to achieving a desirable finished product".

Perujo contends that while each plant protein presents specific flavour challenges, manufacturers

can utilise solutions to correct or mask off-notes. For example, ADM's soluble corn fibre ingredient line, Fibersol, is said to help balance the flavour profile of plant protein milk alternatives.

InnovoPro, which claims to be the first company to launch a 70% chickpea protein concentrate, sees in the legume a panacea to many of the most common plant protein challenges.

CEO Nechushtan told *FoodBev* about a few of its reported advantages: "For beverages, the neutral taste allows the producer to easily control the taste and adjust it to their needs. Furthermore, the high water and oil holding capacities highly contribute to the mouthfeel."

Looking ahead

2020 has seen InnovoPro raise \$18 million in Series B funding, and investment continues to pour into the sector elsewhere. A consortium that includes Ingredion has just committed \$25.7 million to improve the functionality of pulse-based proteins. Roquette is on track to open the world's largest pea protein plant by the end of the year. Such moves herald a dynamic future for the market.

Meanwhile, the diversity of plant-based proteins on offer means there is no need for a one size fits all solution for beverage manufacturers; this is just as well, as consumers' thirst for innovative offerings shows no sign of abating. ●