The pharma effect

Interest in gut health and weight loss related to GLP-1 drugs puts protein and fiber center stage at this year's IFT expo

By Heather Granato

he word "pharmaceuticals" doesn't appear in any description of the Institute of Food Technologist, but in 2024, pharma was certainly stalking the halls of the Institute's premiere event.

And possibly creating a potentially huge market opportunity for innovative brands.

At this year's IFT FIRST Expo, the majority of the talk was on macronutrients and how to position products to support consumers' weight loss and gut health journeys, a quest increasingly paired with pharmaceuticals. The GLP-1 drugs that have revolutionized

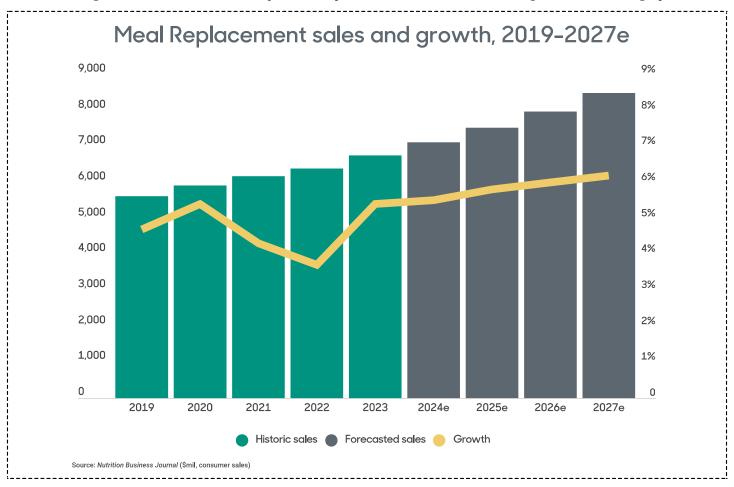
society's approach to combating obesity suppress appetite, and yet consumers still need to get appropriate levels of fiber and protein to support metabolic health and muscle mass. Now, ingredient suppliers are gearing up to deliver more plant-based proteins to meet a growing market need. According to Mintel, 40% of consumers are including plant proteins in their diet, with nearly two-thirds of those respondents expecting to increase consumption in the future.

Beneo, for example, focused on the use of plant-based proteins to deliver valuable

NBJ Takeaways

- » Addressing the nutritional needs of consumers using GLP-1 weightloss drugs is driving innovation to deliver higher protein and fiber levels in calorie-conscious formats
- » Beverages and bars remain the go-to for delivering efficacious doses of functional compounds
- » Precision fermentation is carving out its message and niche as a sustainable platform to create and bring to market nutraceutical compounds

amino acids, while also discussing how prebiotic fibers can balance blood glucose levels during the day and reduce between-meal cravings, an important transition after the drugs. Kevin Reed, customer technical support manager, notes the company is promoting faba beans as a high-protein flour



with less flavor impact in formulation. It can also function as an egg replacer in muffins, Reed promises, offering a snack alternative with added value.

Faba and other plant-based proteins were found around the event. Roquette released its faba as a complementary protein to its pea offerings, with the goal of offering proteins with sustainable production. According to Alexandre de Souza Carvalho, global head of marketing, the company is also looking to address gaps in the innovation pipeline around fiber, leading it to extend the Nutrios soluble fiber offerings. Similarly, Tate & Lyle offered crunchy snacks and falafel bites with soluble fiber and chickpea flour, designed to increase fiber intake. Susan Butler, senior manager of food and beverage solutions, says the company is focusing on fibers and sugar reduction in product development as areas where consumer consumption patterns can be influenced.

Ingredion showcased its new Vitessence Pea 100 HD, a pea protein optimized for cold-pressed bars, helping to maintain the softness throughout shelf life. This offers a smooth, creamy texture, which the company has identified in consumer studies as preferred sensory attributes. During IFT, the company offered a prototype chocolate tahini jelly protein bar. Puris doubled down on the snack options, offering a gluten-free chocolate donut that incorporated its Puris pea protein into the donut and glaze, as well as chocolate sandwich cookies using both pea protein and pea starch.

Alliance and innovation

Delivering protein and complementary nutrients is something Balchem is collaborating on with its supply chain partners. One example was developing an extruded protein crisp, combining pea protein with CanolaPRO plant protein from DSM-Firmenich. Josephine Nakhla, strategic marketing and business development manager at Balchem, says the crisp eases manufacturing and can be used in different formats, particularly bars. "Ultimately, the goal is to change the bar experience so it's not mundane day after day," she says. Similarly, Balchem showcased an extruded crisp that combined collagen with pea protein, removing the challenge of collagen's

Fermentation processors highlight sustainability credentials

marketing in the food and beverages space at the IFT show. Consider the work of Elo Life Systems, which is using plants as "biofactories" to produce desired molecules. At this point, the focus is on mogrosides for sweetening; engineering the gene into sugar beets allows the mogrosides to be produced naturally, extracted early, with the rest of the plant going into sugar production. Field trials are currently underway, with intention to commercialize

iotechnology and fermentation outfits continue to be hard on sustainability

by 2026. According to Michele Fite, Elo Life Systems chief commercial officer, the intent is to find high-value ingredients in nature that are difficult to access, scale and extract; using high-yielding local crops as biofactories allows production of targeted molecules at scale, with the remainder going to its existing purpose.

Another startup, Helaina, is using a fermentation platform for colostrum-based ingredients, using a closed loop reaction to yield colostrum that is bioidentical to human sourced. The company is working on GRAS affirmation and notes that the glycoprotein is produced through sustainable fermentation and could be used in not only supplements but in spreads, beverages and bars.

Similarly, TurtleTree is focusing on the production of lactoferrin through precision fermentation. Aletta Schnitzler, chief scientific officer, says the use of such a process for dairy proteins uses less land, water and electricity and can be established in areas that can't support traditional farming. Its LF+ lactoferrin is self-affirmed GRAS, as it is structurally and functionally biosimilar to dairy lactoferrin; to date, it is being formulated into functional beverages and shots.

stickiness while allowing an enhanced protein and nutrient blend for formulators.

US Soy was also on hand, promoting the formulation and sustainability credentials of the classic plant protein, soy. As Jean Heggie, senior consultant, notes, soy protein can be delivered in multiple formats, from flour to isolate and concentrate, allowing myriad functional applications. "The growth opportunity is around GLP-1-enabled diets," she comments. "We need to increase protein via nutrient density in portion-controlled food for that population." The perceived taste challenges are something she says has not only been addressed via technology but is truly perceived by younger consumers as versatile in all formats. "It's really the 1980s buyer of soy who we need to bring back," she adds.

The new and the novel

Unique product prototypes were easy to find on the show floor. Brenntag, an ingredient distributor, offered inspiration to its customers by developing three varieties of popcorn. According to Terry Wagner, senior product development scientist, taking the relatively flat category of popcorn and getting creative with a liquid prebiotic fiber as a lighter carrier syrup can allow additional inclusions, from healthy spices to probiotic yogurt pieces.

Among the few prototypes marrying functional ingredients into a mainstream food offering was a line of cookies from Plant Lipids. The company developed three varieties of NutriBites Cookies, containing functional ingredients and positioning with structure/function claims. Concepts on sample included a 'Boost Immunity' vanilla cookie with CuroWhite powdered curcumin (from Glanbia) that "Improves Memory & Concentration," a cinnamon option showcasing bacopa extract and a 'Boosts Energy' ginger variety with moringa and polyphenols from green tea and pomegranate. 🎇