



Innovation Ushers in New Era of Plant-based Flavors, Applications and Products



The term “vegan” has been around since the 1940s, but only recently has it become a driving food market trend. Research shows that trend and the demand for plant-based products is just getting started. The vegan food market was valued at \$14.2 billion in 2018. It’s predicted to nearly double to reach \$31.4 billion by 2026, according to Allied Market Research. That’s a projected compound annual growth rate of 10.5 percent.

Vegan consumers do not buy or eat any animal products, including egg and dairy, traditionally for ethical, health or environmental reasons. Vegans are deeply committed to these causes. Veganism isn’t a diet – it’s a way of life.

Traditionally, vegan foods have been healthy, plant-based options that appealed to an earthy-crunchy consumer segment. Vegan products often served as a counterpoint to mainstream food trends and flavors.

That is changing as veganism has gained mainstream popularity and a push to develop a broader array of plant-based flavors has grown. In the past, vegans accepted that giving up dairy products meant giving up dairy textures and flavors. Today’s consumers don’t want to make that same sacrifice. They crave products with milk’s creamy texture or nutty cheesiness, but with a dairy-free label. Concepts like “vegan junk food” – unthinkable just a decade ago – have become major flavor trends.

Plant-based products are moving from niche natural food stores to the most popular retail supermarkets. They’re in our morning coffee and our backyard barbeques. They’re showing up on menus at all kinds of restaurants and at all kinds of price points, from fast-casual takeout to exclusive fine dining.

Vegetarians, flexitarians and omnivores are all more likely to try to a plant-based option on a menu or in the grocery store.

The modern plant-based movement is marked by new demands for flavor and a new range of applications. Today’s consumers want plant-based food that looks and tastes just as good as its animal-based counterparts. And they’re getting their wish. Thanks to food manufacturing innovations, plant-based products are more delicious than ever, which is contributing to their growing popularity.

Expanding on Established Plant-based Formulations

Bluegrass Ingredients first identified a growing customer demand for dairy-free cheese solutions years ago. After a number of customer requests, the company formulated and began selling its first plant-based cheddar cheese powder in 2014. This collaboration with customers to create a plant-based cheese solution for consumers satisfied a key non-dairy market segment. Its powder formulations created opportunities to add cheese flavors while maintaining a clean vegan label for a number of products. But as the appetite for plant-based flavors and applications has grown, particularly among dairy substitutes, Bluegrass has shifted to innovating new formulations and products in the sector.

This innovation began with yogurt. Yogurt sales have been on the decline since 2015 and are expected to decrease by 10 percent by 2024, according to Mintel data.

Research shows consumers are seeking out non-dairy yogurt alternatives and plant-based options that still deliver probiotic benefits.

With the growing demand for plant-based yogurt, the need for other applications is sure to increase as well. Recognizing this trend, Bluegrass set about formulating a plant-based yogurt powder.

Creating an Innovative Culture ... and Texture

Bluegrass' innovative research and development process started with creating a plant-based yogurt that could be spray dried and converted into a powder. Developing a plant-based yogurt powder is all about crafting the right culture and texture. That process requires a research and development approach that answers a unique challenge – using all new ingredients and techniques to develop products that taste and feel like some of the most recognizable flavors we know.

As industry demands for non-dairy and clean-label alternatives accelerates, Bluegrass' roots as a dairy powder manufacturer have become a defining competitive advantage. Its team members have spent their careers in the dairy and cheese industries and even serve as judges at tasting competitions.

With more than 100 combined years in dairy product development, they are certified experts in what makes dairy products taste great and can draw on that expertise to develop better-tasting plant-based alternatives.

Researching and Developing a New Industry Standard

As Bluegrass refined its non-dairy yogurt formulation, it relied on a formalized development process that used dairy yogurt in both powder and slurry formulations as the gold standard for taste and texture.





This includes a multi-tiered process in which a team of flavor experts identifies key elements of dairy yogurt to serve as a baseline. Then, flavor experts perform detailed testing with side-by-side analyses including blind taste tests with both raw ingredients and in applications created in the firm's test kitchen. These tests evaluate key product attributes including flavor, texture, mouthfeel, color and more.

The process creates multiple formulations and product iterations until the end product delivers a flavor profile and texture that matches traditional yogurt with vegan specifications.

This rigorous testing process has been critical for all of Bluegrass' non-dairy powders. That process of tracking back to traditional dairy flavors and attributes, combined with a team of dairy industry experts with the most refined palates in the industry, has resulted in superior products that are indistinguishable from their dairy counterparts. That partnership will be critical as the vegan flavor segment moves into more specific applications to satisfy high demands and more refined palates of today's vegan consumers.

Satisfying a New Appetite for Plant-based Applications

With its plant-based yogurt powder formulation tested, finalized and ready for distribution, Bluegrass has used that foundation to expand to additional products, including plant-based sour cream and butter powders. This broad product base has created a wide range of application opportunities to match growing plant-based consumer demands.

With these product categories in a versatile powder format, the potential applications are endless, from new snack products and chip flavors and a wide range of sauces and dips to complete meals like mac 'n cheese with plant-based cheese and butter.

With baseline formulations established, the rush to develop and deliver these applications is the next frontier in the plant-based flavor movement. Bluegrass' research and development has resulted in products that fill an identified market need. The next iteration of innovation will include more customer-driven development – food manufacturers with very specific flavor and label demands will turn to companies like Bluegrass to create new powder formulations.

These processes require an additional layer of collaboration and focus on customer goals. That partnership will be critical as the plant-based flavor segment moves into more specific applications to satisfy high demands and more refined palates of today's consumers.



To learn more about Bluegrass' plant-based powders and other market-driven flavor solutions, [**Contact Us.**](#)