> INDUSTRY INNOVATION

ALTERNATIVE DAIRY

Dazzling the Market with Plant-Based Drink Texture

A 360° approach to texture can make a winning impression on consumers in the fast-moving, plant-based market.

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he market for plant-based beverages is evolving fast. And with that growth, more experimental products are emerging with a distinctive taste and texture. Thanks to the diverse assortment of plant bases now available, the opportunities to capture the consumer's eye are vast.

Global value in plant-based beverages has been increasing at 10.5% CAGR, according to Innova Market Insights. And this growth is expected to continue. This opportunity is bringing many entrants to the plant-based beverage category. Regardless of the size of these newcomers—all face the challenge of delivering a great sensory experience. In a plant-based beverage context, that means starting with the texture. A stable texture is the foundation of flavor delivery, and there



are several things to consider to get it right.

Start with the Base

The first step to the right texture is understanding the plant base, whether it's well-known, such as oat, rice, or almond or an emerging base, such as hemp, quinoa, or chia. The plant base's natural viscosity can range from watery to porridge-like, neither of which are ideal for a smooth and appealing drink.

Starch-containing cereal bases will invariably require initial treatment with a liquefying enzyme to reduce viscosity by breaking down the starch. Once this is complete, a secondary enzyme treatment may be applied to release natural sugar components, such as glucose, and, in doing so, reduce the need for added sugar in the beverage formulation.

For first-timers in plant-based beverage development, it may come as a surprise that supposedly creamy coconut and almond bases deliver very little viscosity at all. Without help, any insoluble fibers or other particles will simply end up as an unattractive, sandy sediment at the bottom. That brings us to the next consideration, the stabilizer solution.

Tailoring the Stabilizers

Among dairy manufacturers, stabilizers are a long-used tool for tailoring the texture and stability of dairy beverages. But experience shows that solutions developed for dairy may not interact the same way when it comes to plant-based beverages.

Since the plant-based trend turned mainstream, manufacturers have increasingly relied on gellan gum for its stabilizing and suspension properties and locust bean gum to achieve a creamier texture that lingers in the mouth, supporting flavor release. Both ingredients contribute to a consumer-friendly clean label, a key influencer of the plant-based trend overall. A blend of these and possibly other stabilizers tailored to each plant base's properties are likely to give the best results.

Multifunctional Texturizers

Because most plant-based beverages have a healthy halo, consumers generally also expect to find a good nutritional profile when they look at the label. Protein or fiber may be added to optimize the formulation as this is often not provided at a sufficient level by the plant base alone.

Soy, pea, and carob protein are among the multi-functional options on the protein side, useful for providing nutrition and texture. Carob, for example, can deliver protein, fiber, and mouthfeel in one ingredient while differentiated soy proteins are available to suit various beverage formats and protein levels. Dietary fiber such as polydextrose can play a further part in masking bitter notes from some plant bases.

The Shortest Road to Success

Before starting to develop a new plant-based beverage, the most critical consideration of all is the whole product journey. This begins at the initial treatment of the raw material and leads to the addition of extra nutrients, securing the right texture and stability, and eventually scaling up to factory production. Each step has an overlapping influence on the sensory appeal of the final product. In other words, a big-picture approach is vital to an efficient development process that brings the best product to market in the shortest possible time.

Supermarket space is limited, so thorough market research is indispensable to make sure new plant-based innovations hit the right spot. As the dairy alternatives category is already becoming crowded, manufacturers may find new growth opportunities by combining plant bases with other categories, such as smoothies and juices. Specific nutritional needs and occasions, such as on-the-go nutrition or sports drinks, are possible targets of these new product launches.

Success is about delivering the right appeal at the right time to consumers who, despite the fact that many are still shaping their plant-based preferences, are notoriously unwilling to compromise. Plant-based beverages may carry messages about health and sustainability that strike a chord in consumers' hearts. But even the most memorable brand story needs a great texture and good flavor delivery to make a lasting impression on a competitive market.