Tap into the 'blend trend'

Blending plant based-proteins with dairy proteins can deliver the optimal solution.

By Terri Rexroat

Today's consumers expect a lot from the foods and beverages they consume. They desire clean labels, nutritional/health-related benefits and convenience — all without sacrificing taste.

Coupled with a growing interest in plant-based foods and a rising awareness of the importance of optimizing essential nutrients, especially protein, manufacturers are having to balance many needs. As a result, we've seen the emergence of the "blend trend" — combining more than one complementary protein source in any food, beverage or supplement to enhance benefits.

The industry continues to lean on the versatility of U.S. dairy proteins, which remain proven tools — easily boosting the protein content in foods and beverages while contributing great flavor and unsurpassed nutrition.

Complete nutrition

A common reason for blending protein sources is to achieve specific nutritional goals. While all animal-based and most plant-based foods contain some protein, not all proteins are created equal.

Proteins differ in their quality, digestibility and bioavailability. Animal proteins are high-quality complete proteins that are defined as containing biologically efficacious amounts of all nine essential amino acids required by the human body.

Other than soy, most plant proteins typically are incomplete and, therefore, of lower nutritional quality due to inadequate quantities of one or more essential amino acids. The complete nature of dairy proteins means that a lower volume — and, therefore, fewer calories — is needed to meet dietary needs.

Blending dairy and plant proteins allows for improved nutrition and ease of formulation while satisfying modern consumers.

Formulation functionality

While proteins can present formulation challenges, dairy proteins offer exceptional functional benefits in finished foods and beverages, including solubility, heat stability, gelling, foaming and emulsification.

In addition, dairy proteins are minimally processed. Unlike plant-based sources, dairy proteins naturally occur in liquid form, so their physical separation and isolation are easily accomplished without the need for additional milling steps or chemicals.

Clean, natural taste

According to sensory research conducted by North Carolina State University, dairy proteins are mild-flavored and exhibit sweet, aromatic and milky attributes, while plant sources exhibit less desirable flavors such as beany, earthy, sulfurous and sour notes. These differences in sensory perception allow dairy proteins to be combined with a variety of ingredients without overpowering the flavors of foods and beverages with which they are mixed.

Consumers around the world are eager to explore more adventurous and global flavor pairings. Blending proteins creates exciting innovation opportunities for protein fortification in the better-for-you space for indulgent, sweet or savory applications.

Diverse applications

As consumer interest in higher-protein diets continues to expand, there has been diversification in applications that bring to life convenient and flavorful ways for consumers to increase their protein intake throughout the day.

Milk and whey proteins have emerged as an innovative solution for food and beverage manufacturers to meet this demand. Beyond nutrition, milk and whey proteins provide flavor and texture enhancement and improved appearance and shelf life. They are a natural fit for use in coatings for snacks such as bars and nuts. Health-conscious adults and seniors can easily incorporate whey protein into oatmeal or plant/nut-based dips as a convenient way to further increase protein consumption throughout the day.

Keeping up with demand

No matter the trend, formulators know U.S. dairy delivers.

U.S. dairy proteins are made from sustainably produced milk, allowing developers to create these innovative and convenient products with great flavor, nutrition and a simple ingredient list.

Visit ThinkUSAdairy.org for more information about U.S. dairy protein ingredients. ■

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