

The demand for protein in food applications continues to grow, with consumers actively seeking out foods and beverages with higher protein content that are delicious and provide better nutrition and satiety. High protein in dairy applications delivers the "better-for-you" indulgence consumers crave. However, producing high protein applications from dairy protein sources can pose formulation, manufacturing and stability challenges which can impact product cost well as consumer satisfaction.

Typical Dairy Applications

Beverages

- Frozen desserts
- Desserts and puddings
- · Cheese spreads and dips

Formulation Challenges in Application

- Stability
- Texture
- Buffering and pH control
- Fouling

- Viscosity
- Mouthfeel
- Protein dispersion
- Sedimentation prevention



Customized Solutions

Functional systems can be used to address challenges in formulating high protein in a variety of dairy applications. Below are examples of challenges solved.

Application	Formulation/ Manufacturing Challenge	JOHA® Functional Phosphates	BEKAPLUS® Stabilizing Systems
Ready-to-drink beverages/shakes	 Stability/age gelation Protein dispersion Protein and mineral sedimentation Fouling Buffering/pH control Viscosity control 	•	
	Viscosity increase Suspension of insoluble particles		•
High protein coffees Tea lattés	 Neutralization of free organic acid Buffering/pH control Stability/age gelation Fouling Protein dispersion 	•	
Desserts Puddings	Protein dispersionBuffering/pH controlViscosity	•	
	Texture Mouthfeel		•
Cheese spreads	Protein dispersionBuffering/pH controlViscosityTextureMouthfeel	•	
Frozen desserts	Protein dispersionFoulingBuffering/pH controlViscosity	•	
	Texture Mouthfeel		•

Why Work with ICL Food Specialties

ICL Food Specialties is an ingredient solutions provider with over 80 years of experience in the food and beverage industry. We combine the power of a global leader with the passion of an agile team of local experts to help you create solutions that impact the future of food.



Contact us at: iclfood.com/contact



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