



Get More from Every Ingredient.

*VersiLac® whey permeate improves flavor,
functionality and formulation economics
across multiple applications.*



CONFECTIONERY | BAKERY | DAIRY | BEVERAGES | PREPARED FOODS

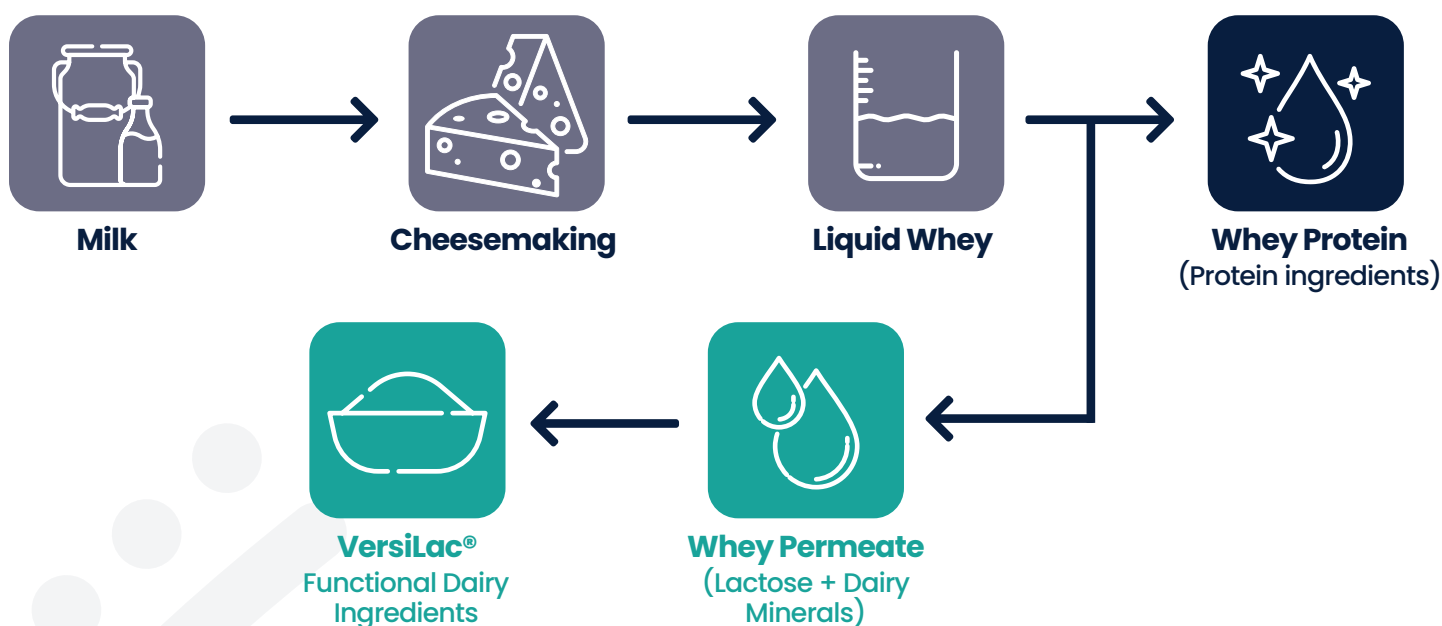
One Ingredient. Multiple Functional Benefits.

What Whey Permeate Contributes

- Natural dairy flavor
- Lactose sweetness
- Body and mouthfeel
- Maillard browning and color development
- Opportunities to reduce higher-cost dairy ingredients
- Formulation flexibility

Where Does Whey Permeate Come From?

During whey protein production, the protein is removed, leaving the naturally occurring lactose and dairy minerals that become whey permeate.



Why Proliant Dairy Ingredients?

More than 30 years of helping food manufacturers improve formulations through consistent whey permeate quality, dependable supply and technical expertise.



Technical Partnership

Application scientists and formulation support from concept through commercialization.



Reliable Supply

U.S.-based manufacturing with consistent quality and dependable supply for customers worldwide.



Innovation

Pilot plants, research laboratories and an Innovation Kitchen designed to accelerate product development.



Food Industry Focus

A trusted partner serving bakery, dairy, confectionery, beverage and prepared food manufacturers.

Every Ingredient Should Earn Its Place

Food formulators balance performance, processing, cost and consumer expectations every day. VersiLac® whey permeate helps address multiple formulation objectives with a single ingredient.

Your Goal	How Whey Permeate Creates Value
Reduce formulation cost	Replace a portion of higher-cost dairy solids while maintaining product quality.
Strengthen dairy flavor	Build authentic dairy notes and round harsh flavors.
Improve baked color	Lactose supports consistent browning and caramelization.
Reduce sodium	Enhance flavor perception while supporting sodium reduction strategies.
Improve texture	Contribute dairy solids that enhance body and mouthfeel.
Simplify formulations	One ingredient delivering multiple functional contributions.

Common Formulation Opportunities

Depending on your application, VersiLac® ingredients may help reduce or replace:

- Nonfat dry milk/skim milk powder
- Whole milk powder
- Sweet whey powder
- Demineralized whey powder
- Lactose
- Cheese powder
- Cocoa
- Salt
- Maltodextrin
- Sugar



Proliant Dairy Ingredients is a leading global producer of whey permeate, serving food manufacturers with consistent, high-quality dairy ingredients backed by technical expertise and collaborative formulation support.



Where Whey Permeate Creates Value

Application	How Whey Permeate Creates Value
Crackers	Browning, dairy flavor, sodium reduction and lower formulation cost
Cookies	Lactose sweetness, color development and reduced added sugar opportunities
Seasonings	Dairy flavor, salt reduction, improved flavor balance and lower dairy solids cost
Chocolate	Milk solids replacement, flavor enhancement and formulation cost optimization, cocoa powder replacement
Processed cheese	Flavor balance, solids contribution and sodium reduction opportunities
Sauces	Mouthfeel, dairy notes, flavor enhancement and reduced sodium formulations
Frozen desserts	Dairy solids, lactose sweetness and improved dairy flavor
Beverage	Carrier functionality, dairy flavor and lower mineral options for clean flavor profiles
Snack foods	Seasoning carrier, dairy flavor, salt reduction and cost optimization
Soups & seasonings	Flavor enhancement, sodium reduction, carrier functionality and improved mouthfeel

Processing Benefits

- Consistent ingredient quality for reliable production
- Uniform performance from batch to batch
- Easy incorporation into existing formulations
- Supports efficient manufacturing processes
- Dependable functionality across a wide range of applications

The Right Whey Permeate for Every Formula

Whether your priority is functionality, mineral balance or flavor optimization, the VersiLac® portfolio offers whey permeate solutions designed to fit your formulation needs.

Bring us your formulation challenge. Together, we'll identify where VersiLac® can create the greatest value in your formulation.



VersiLac®

Our flagship whey permeate for bakery, confectionery, dairy, prepared foods and seasonings.

VersiLac® LM7

Approximately 7% mineral content for formulations requiring greater mineral control.

VersiLac® LMS

Approximately 6% mineral content with our cleanest flavor profile for beverages and delicate applications.

Technical Partnership That Goes Beyond the Ingredient

Choosing the right ingredient is only the beginning. Our food scientists and application specialists work alongside your team to identify formulation opportunities, optimize performance and help move products from concept to commercialization.

How We Help

Formulation Expertise

Work directly with application scientists to evaluate ingredient functionality and identify formulation opportunities.

Innovation Kitchen

Develop and refine products through hands-on formulation and application testing.

Pilot Plant Validation

Evaluate ingredient performance before commercial production with pilot-scale testing.

Commercialization Support

Receive technical guidance throughout product development to help accelerate commercialization.

Supporting Every Stage of Product Development

- Innovation Kitchen
- Eight research laboratories
- Two pilot plants
- Food scientists and application specialists

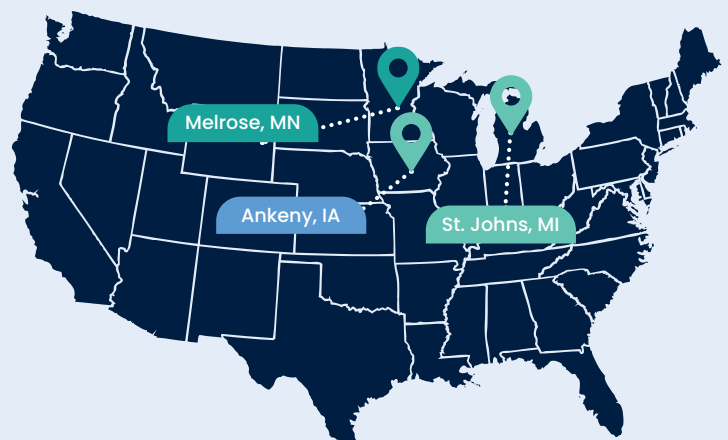
How We Support Your Team

Whether you're exploring whey permeate for the first time or optimizing an existing formulation, our technical team provides practical support throughout the product development process.

- Ingredient selection guidance
- Formulation recommendations
- Prototype evaluation
- Pilot-scale validation
- Commercialization support



Strategically located in the heart of America's dairy industry, serving customers across North America and around the world.



Every Component of Milk Has Value

During cheesemaking, whey protein is separated for protein ingredients, leaving behind naturally occurring lactose and dairy minerals. Proliant transforms these valuable components into functional dairy ingredients that help manufacturers improve formulations while making better use of every drop of milk.

As a proud participant in the U.S. Dairy Stewardship Commitment, we're advancing sustainability through responsible manufacturing, consistent quality and continuous innovation.

Could VersiLac® Improve Your Formula?

If you're looking to:

- ✓ Reduce ingredient costs
- ✓ Enhance browning
- ✓ Improve mouthfeel
- ✓ Improve dairy flavor
- ✓ Reduce sodium
- ✓ Simplify formulations

Let's Talk Formulation

Whether you're reformulating an existing product or developing something new, our technical team is ready to help identify where VersiLac® can create value in your formulation.



Request Samples | Schedule a Formulation Consultation | Visit Our Innovation Kitchen

proliantdairy.com