



**glanbia**  
nutritionals

**Solutions**  
*Portfolio*

NORTH AMERICA EDITION

**Just add Glanbia.**

To everything we touch, we  
add the perfect ingredient,  
building better nutrition for  
people everywhere.





**Just add  
Glanbia.**

At Glanbia Nutritionals, we create nutritional and functional ingredient solutions for the food, beverage, supplement and animal nutrition industries.

We combine our expertise in food science and the value chain with our deep knowledge of our customers and their categories—creating our recipe for superior partnerships and mutual success. A recipe that no one else offers.

With our custom-built services and ability to source ingredients globally, we can create limitless possibilities for enhancing and enriching your company's offerings. We'll help you solve virtually any food or nutritional challenge, working directly—and in true partnership—from start to finish.

We invite you to see what's possible when you add Glanbia to your business.

# Table of Contents

<b>Bioactives</b>	5
<i>Dairy Bioactives</i>	5
<i>Non-Dairy Bioactives</i>	7
<b>Cheese</b>	9
<i>Cheddar Cheese</i>	9
<i>Colby &amp; Jack Cheeses</i>	9
<i>Gouda Cheese</i>	10
<i>Specialty Cheese</i>	11
<i>Innovation Cheese</i>	12
<i>Organic Cheese</i>	12
<b>Flavors</b>	13
<i>Flavor Technologies</i>	13
<i>Flavor Solutions</i>	13
<b>Grains &amp; Seeds</b>	15
<i>Chia</i>	15
<i>Flax</i>	15
<i>Ancient Grains</i>	16
<i>Oats</i>	16
<i>Functional Solutions</i>	17
<b>Micronutrient Straights</b>	18
<i>Vitamins</i>	18
<i>Minerals</i>	18
<i>Amino Acids</i>	18
<i>Botanicals &amp; Herbs</i>	18
<b>Proteins</b>	19
<i>Plant-Based Proteins</i>	19
<i>Dairy-Based Proteins</i>	20
<i>Functional Solutions</i>	20
<b>Services</b>	22
<i>Custom Nutrient Premixes</i>	22
<i>Aseptic Beverage Manufacturing</i>	23



Our range of bioactives are precisely formulated to improve cell, organ and overall body function. We constantly collaborate with new partners to keep our place at the forefront of the category. From muscle growth, to weight management, to heart health and more, our industry-leading bioactives will help your products, and your consumers, perform at their best.

Bioactives

## Dairy Bioactives

### **Prolibra® Weight Management System**

Whey protein derived ingredient that targets fat loss for healthy weight management.

*Ready-to-mix powders, ready-to-drink beverages, nutrition bars, snacks*

### **PepForm® Peptides**

PepForm® is a revolutionary patent-pending peptide carrier technology designed to improve the solubility and functionality of amino acids and other bioactives.

*Ready-to-mix powders, ready-to-drink beverages and shots, tablets, capsules, bars*

### **GroPlex™**

Unique combination of dairy peptides and proteins that helps drive amino acids transport in to muscle cells and helps promote muscle protein synthesis.

*Ready-to-mix powders, ready-to-drink beverages*

### **SatieTein™**

Milk protein isolate which contains casein molecules that are cross-linked to form a larger protein size. The larger protein size slows down enzymatic digestion and helps promote increased satiety and reduced desire to eat.

*Ready-to-mix powders, ready-to-drink beverages, nutritional bars*

## Hydrovon™ EET

Hydrolyzed whey protein phospholipid concentrate with embedded enzyme technology designed to target the release of leucine peptides.

*Ready-to-mix powders*

## CFM® Nitro P (Actinos)

All natural whey derived nitric oxide synthase (NOS) activator to increase Nitric Oxide in endothelial cells.

*Ready-to-mix powders, ready-to-drink beverages and shots, tablets, capsules, bars*

## TruCal® Milk Mineral Complex

Natural milk minerals for optimal bone health.

*Ready-to-mix powders and ready-to-drink beverages, yogurt, bars, processed cheese, bakery, cereals, snacks, capsules, tablets*

## Bioferrin® Lactoferrin

Bovine lactoferrin - a natural, biologically active milk protein isolated from fresh sweet whey using fractionation separation technologies. Gentler source of iron, supports a network of healthy biological functions (immune boost, intestinal health, cardiovascular health, weight management, skin health, joint, bone).

*Infant formula, functional food and beverages, dietary supplements, cosmetics*

## ProTherma™

An agglomerated hydrolyzed whey protein designed for use in hot ready-to-mix beverage applications. Protherma protein is stable, soluble and high in protein.

*Ready-to-mix hot coffee, tea and cocoa beverage systems, soups*

## WheyXR™ Extended Release

A whey protein concentrate that is modified to have a prolonged release of amino acids for recovery.

*Ready-to-mix powders*

## Salibra®

A bioactive whey concentrate enriched with Immunoglobulins, growth factors and Lactoferrin. Salibra has a high protein content to support active consumers and Healthy Aging. Salibra supports overall general health and well-being.

*Ready-to-mix powders, ready-to-drink beverages, yogurts, smoothies, tablets*

## NutraSol® Protein Fortification Systems

Milk protein ingredients that provide protein fortification in food and beverage systems.

*Ready-to-mix powders, ready-to-drink beverages, yogurts, dairy foods*

## Non-Dairy Bioactives

### CapsiAtra®

A dihydrocapsiate compound naturally found in CH-19 Sweet peppers that holds clinical benefits in weight management, endurance and metabolism.

*Tablets, capsules, softgels, ready-to-mix powders*

### VitaCholine®

A high quality source of choline for cognitive development and function from pregnancy throughout all of life's stages.

*Tablets, capsules, softgels, ready-to-mix powders, ready-to-drink beverages & functional foods*

### truebroc®

The highest concentration of glucoraphanin available; this extract from a patented breed of broccoli seeds boosts the body's innate antioxidant systems for extended periods.

*Ready-to-mix powders, tablets, capsules, functional beverages & foods*

### AminoBlast®

Instantized and functionally optimized BCAAs designed for cold water dispersibility and easy inclusion into ready-to-mix and ready-to-drink applications.

*Ready-to-mix powders, ready-to-drink beverages*

### Carnipure™

The highest quality, most research-backed L-Carnitine on the market. This optimized form plays an important role in energy metabolism and weight management.

*Tablets, capsules, softgels, ready-to-mix powders, ready-to-drink beverages & functional foods*

### HydroMax®

The industry's first stable, highly concentrated form of powdered glycerol (65%) that offers a unique combination of greater potency and function, delivering exceptional pump sensation.

*Ready-to-mix powders, tablets, capsules, softgels*

### IGNITOR®

A proprietary blend of proteolytic enzymes designed and optimized to efficiently release BCAAs and glutamine from protein formulations in order to maximize the mTOR-activating effect.

*Ready-to-mix powders, tablets, capsules, softgels*

### Velositol®

A proprietary formulation that increases the cells' ability to take up amino acids. In the muscle cells this results in a doubling of the rate of muscle protein synthesis; thereby maximizing the power of protein.

*Ready-to-mix powders, ready-to-drink beverages, capsules, tablets*

### **MenaQ7® Vitamin K2 MK-7**

This first-in-class, only clinically researched vitamin K2 (MK-7) binds to calcium that gets lodged along the arterial walls and shuttles it to the bone, where it is needed. Only MenaQ7 is clinically validated and patented for cardiovascular benefits.

*Tablets, capsules, softgels, ready-to-mix, ready-to-drink beverages, functional foods*

### **OmniMEGA™**

An advanced omega-3 fish oil powder allowing for the ability to formulate omega-3's into powdered multi-ingredient supplement applications including direct compression tableting and ready-to-mix beverages. With this patented technology there are clear advantages over standard fish and krill oils, such as issues with auto-oxidation, limited shelf-life, sensitivities to air, heat and light as well as removing fish burps. Gelatin-free, multi-ingredient formulations can be achieved as well.

*Tablets, capsules, ready-to-mix powders*

### **Nitrosigine®**

A patented complex that binds arginine with silicate, unlocking powerful synergistic effects. Supports healthy circulation and blood vessel integrity. Engineered to work fast, Nitrosigine keeps working for up to three hours after just a single dose and, with continued use, helps build nitric oxide levels over time for vasodilation.

*Ready-to-mix powders, capsules, tablets*

### **Sensient® Colors**

A comprehensive selection of natural (annatto extract, carmine, anthocyanins, beta carotene etc.) and synthetic (FD&C primary dyes and lakes) colors for the pharmaceutical, nutritional supplement, food, beverage and confection industries.

*Tablets, capsules, soft gels, ready-to-mix powders, ready-to-drink beverages & foods*





Our award-winning cheeses have the highest quality and are made at a scale that always assures supply. Inspired by techniques and flavors from around the world, our cheese makers bring together the most efficient processes with insightful research to bring new solutions to the ever-evolving cheese market.



## Cheddar Cheese

Our all natural cheddar cheese is ranked among the best in the world.

### Accelerated Aged Colored Cheddar Cheese

Using cultures and temperature control to create a bold, aged flavor faster - this cheese delivers the firm body, closed texture and clean odor typical found in more mature cheddar. Annatto and/or Beta-Carotene added for color.

*Available in 40lb. & 640lb. block*

### Accelerated Aged White Cheddar Cheese

Using cultures and temperature control to create a bold, aged flavor faster - this cheese delivers the firm body, closed texture and clean odor typical found in more mature cheddar.

*Available in 40lb., 640lb. block*

### White Cheddar Cheese

Our natural, white cheddar has a firm body, closed but creamy texture and a clean odor. Reduced Fat, Reduced Sodium varieties are also available.

*Available in 40lb. block, 540lb. barrel, 640lb. block*

### Colored Cheddar Cheese

Our classic, all natural colored cheddar is one of Glanbia's most popular cheeses with a mild cheddar flavor. It has a firm body, closed texture and a clean odor and flavor. Annatto and/or Beta-Carotene is added for color. Reduced Fat, Reduced Sodium varieties are also available.

*Available in 40lb. block, 540lb. barrel, 640lb. block*

### Chipotle Pepper Cheddar Cheese

The blend of smoked chipotle peppers only compliments the smooth, creamy flavor found in Glanbia's award winning cheddar. Annatto is added for color, also available in white cheddar.

*Available in 40lb. block*

## Colby & Jack Cheeses

A Glanbia staple, these mild cheeses are a best seller and some of the most versatile cheeses we produce.

### Colby Cheese

This semi-hard cheese is similar to cheddar varieties but milder in flavor and softer in body. Annatto is added for color.

*Available in 40lb. block*

Cheese

## Colby Jack Cheese

This favorite marbles white Monterey Jack and orange Colby curd together to deliver a cheese that has a firm body, slightly open texture with a mild flavor. Annatto is added for color.

*Available in 40lb. & 640lb. block*

## Sweet Heat Habanero Jack

Using a recipe of red jalapeno and orange habanero peppers in a creamy Monterey Jack base, US cheese championship judges celebrate this cheese saying it delivers just the right amount of heat and sweet.

*Available in 40lb. block*

## Pepper Jack Cheese

Glanbia's Red and Green Jalapeno pepper cheese consists of just the right amount of peppers in a creamy Monterey Jack cheese to deliver a world favorite. This cheese has a semi-soft body, slightly open texture with just the right amount of Jalapenos to become a classic favorite.

*Available in 40lb. & 640lb. block*

## Red & Green Habanero Pepper Jack

This cheese blends Red and Green Habanero peppers in a creamy Monterey Jack to deliver a cheese with slightly open texture and a unique balance of intensity and mellowness from the peppers.

*Available in 40lb. & 640lb. block*

## Monterey Jack Cheese

With its smooth and creamy texture, this mild cheese has a semi-soft body and slightly open texture with a clean odor and mild flavor.

*Available in 40lb. block, 540lb. barrel, 640lb. block*

## Hatch Pepper Jack

A balanced combination of New Mexico's mouthwatering hatch peppers and our award winning creamy Monterey Jack Cheese. Monterey Jack's mild flavor showcases the sweet taste, mild heat and fresh flavor of the Hatch Peppers in a uniquely delicious blend.

*Available in 40lb. block*

## Gouda

Our Gouda cheeses offers a range of flavors and functions desired in the world's oldest known cheese variety.

### Colored Gouda

It has a semi-soft body and slightly open texture, clean odor and mild to mellow flavor. Annatto and/or Beta-Carotene is added for color.

*Available in 40lb. & 640lb. block*

### European Gouda

Inspired by the Dutch Gouda tradition but with a new American boldness, this semi-hard cheese is creamy, buttery with subtle nutty notes.

*Available in 40lb. block*

### Melt and Shred Gouda (Lower FDB)

Designed to shred and melt better during the ripening period with minimal free oil on the surface of the product. Has a firm body and achieves a mild to medium flavor profile.

*Available in 40lb. block*

### White Gouda

A semi-soft body and slightly open texture with a clean odor and mild to mellow flavor.

*Available in 40lb. block*

## Specialty Cheese

Our specialty cheeses are inspired by flavors from around the world and our cheese scientists enjoy making each cheese unique.

### Asadero Cheese

A semi-soft body with a clean odor and similar in texture to Monterey Jack.

*Available in 40lb. block*

### Accelerated Aged Gouda Cheese

A firm body, closed texture with a clean odor and a developed nutty, buttery flavor. Sweet slight fruity, caramelized, complex notes.

*Available in 40lb. block*

### Asiago

Glanbia's fresh Asiago has a semi-hard body and smooth cheese with no mechanical openings. It has a buttery, slightly sweet, nutty, and mild lipase flavor sure to bring extra flavor to any dish.

*Available in 40lb & 640lb. block*

### Havarti

Glanbia's Havarti cheese is formulated to have a creamy texture and buttery flavor. It has an open texture with small eyes throughout the body.

*Available in 40lb. & 640lb. block*

### Fresh Curd

This cheese has a semi-soft body with a clean, fresh body. This cheese is made in a barrel format for processing and perfect for process cheese applications.

*Available in 540lb. barrel*

### LMPS Mozzarella

It is formulated as a stirred curd Mozzarella with a mild flavor. Uses include salad topping, melted on pizza, or in hot or cold sandwiches and other entrées.

*Available in 40lb. block*

### Muenster

Glanbia's semi soft Muenster is mild in flavor, pale in color. It is not textured with an orange rind but crafted to use for shredding and melting in pizza and sandwiches.

*Available in 40lb. & 640lb. block*

### Parmesan Cheese

A very firm body, slightly open texture and a clean odor and flavor. Parmesan is typically aged 10 months or more. Glanbia's Parmesan cheese produces a slight acid and salty flavor at a younger age but as it matures, it develops sweet, parmy and nutty flavors.

*Available in 40lb. block*

### Queso Quesadilla

A semi-soft body with a clean odor and similar in texture to Monterey Jack.

*Available in 40lb. & 640lb. block*

### Gruyere

Adds delicious creamy and nutty flavors to any dish and melts to perfection. Great for snacking but ideal for cooking, adding texture and mild flavor

*Available in 40lb. & 640lb. block*

### Queso Quesadilla/Asadero

A blend of Queso Quesadilla and Asadero, this semi-soft cheese has a clean odor and is similar in texture to Monterey Jack. It is perfect for shredding and melting applications.

*Available in 40lb. block & 640lb. block*

## Innovation Cheese

Showing our dedication to finding solutions to a changing cheese market.

### Hickory Cheddar Cheese

The combination of natural smoke flavor with Glanbia's delicious cheddar cheese provides a full taste and smooth texture, no sauces needed here.

*Available in 40lb. block*

### Ghost Pepper Jack Cheese

Using a combination of jalapeño, habanero and very hot ghost peppers in a Monterey Jack base, Glanbia's R&D scientists have created one of the hottest cheeses in the market.

*Available in 40lb. block*

### Smoky Hickory Gouda Cheese

A semi hard body, open texture and a clean odor with natural hickory smoke flavor.

*Available in 40lb. block*

### Smoky Orange Gouda Cheese

Citrus and smoky come to life in this cheese which combines the zest of orange peels into our creamy Gouda with natural smoke flavor.

*Available in 40lb. block*

### Pro-10 Protein Cheese

Increases the protein found in regular cheddar by 10 percent. Reducing the fat while increasing the protein content gives this cheese an appealing nutritional profile. Our blend of natural cultures ensures a delicious, award winning cheese that delivers more protein per bite.

*Available in 40lb. block*

### Vitamin D Cheese

Vitamin D cheese is simply fortified with natural Vitamin D3, providing a natural delivery system to carry 20% of your Daily Value for Vitamin D and calcium into your body together. Vitamin D cheese is a natural, excellent food source to an epidemic deficiency.

*Available in 40lb. block*

### Freeze Dried Cheese Shreds

Glanbia now has the capability to freeze dry many of our shreddable cheese varieties. Freeze dried cheese is a shelf stable cheese that functions as a normal cheese once it is rehydrated. It can be used for multiple cooking applications once rehydrated, or for immediate consumption as-is.

*Available in 40lb bag-in-box shreds*

## Organic Cheese

Glanbia offers the following cheeses with organic certification: Cheddar, Monterey Jack, Pepper Jack, Parmesan, Colby Jack and Low Moisture Part Skim Mozzarella. All organic cheeses are certified in accordance to the provisions of Title 22, Chapter 11, Idaho Code, Organic Food Products, IDAPA 02.06.33, Organic Food Product Rules and 7 CFR Part 205 National Organic Program. Certain varieties of cheese are also available in rBST free versions, please contact your sales representative for further details.

*Glanbia's American style cheeses are made to function in shred, slice and dice applications. Product specifications can be adjusted to meet certain customer requirements.*

*All of Glanbia's cheeses are made with pasteurized milk.*



Experts in creating nutritional solutions, we are very familiar with the flavor challenges that arise in developing great tasting nutritional products. Our focus is on Flavor Technologies that deliver a distinct nutritional or functional benefit to a product and Flavor Systems that provide you with an optimized ingredient/flavor solution.

Through collaboration with you, our flavor chemists, R&D scientists and application specialists quickly and reliably deliver delicious flavor solutions that address your unique application challenges.

*We meet many industry specifications including organic, natural, natural WONF, natural type, natural identical, natural & artificial, artificial, halal, non-GMO project verified, kosher, and allergy free.*

## Flavor Technologies

### EasyFlav™

A flavor neutral protein system that masks the off notes of protein, enhancing the overall flavor and nutritional benefits of your protein fortified products.

### CarbOUT™

Fully customizable and easily meet low carbohydrate and serving size requirements. CarbOUT reduces carbs 50-100% and increases protein 10+%.

### DairiDreams™

Dairy flavor technology designed to offer improved nutritionals and authentic flavor profiles, DairiDreams can be used to replace up to 50% of the named dairy ingredients in many applications.

### Sensate™ Flavors

Flavors you can feel! Utilizing our extensive research on chemisthetic flavor sensations, our line of sensate flavors delivers a stimulating, multifaceted sensory experience.

## Masks and Bitter Blockers

Glanbia has invested in developing the most effective flavor technology to address the off-notes in functional ingredients and solve your formulation challenges.

*Protein Masker, Astringency Masker, Bitter Masker, Hydrolyzed Protein Masker, Caffeine Masker, Amino Acid Masker, Vitamin Masker, Acid Masker, Bitter Blocker, Stevia Masker, Peptide Masker, Marine Oil Masker*

## Flavor Solutions

### Indulgent

From red velvet cupcake to campfire marshmallow, let our indulgent flavors spark your imagination and add decadence to your product.

*Cookies n' Cream, Glazed Donut, Crème Brulee, Cappacino, Dulce de Leche, Campfire Marshmallow, Chocolate Peanut Butter, Sea Salt Caramel, Chocolate Chip Cookie Dough, Red Velvet Cupcake*

Flavors

## Vanilla

Vanilla is known as ‘the world’s favorite flavor’ with good reason! Explore the hundreds of vanilla profiles we offer, each carefully crafted to capture the richness and complexity that makes vanilla a global best-seller.

*Vanilla Cake Batter, Vanilla Cream, Vanilla Bourbon, Vanilla Caramel, French Vanilla, Traditional Vanilla, Vanilla Ice Cream, Vanilla Mocha, Vanilla Bean, Butter Vanilla, Tahitian Vanilla*

## Fruit

Some of our most popular fruit flavors include tried and true classics like peach, mango, tart cherry, and watermelon.

*Banana, Fruit Punch, Apple, Grape, Pineapple, Kiwi, Watermelon, Apricot, Pear, Fig, Honeydew, Plum, Tart Cherry, Peach*

## Citrus

Whether you’re looking for a traditional or trending citrus flavor, our citrus offerings span from true-to-fruit tangerine and nostalgic orange creamsicle, to the newly popular calamansi and pomelo.

*Lemon, Lime, Orange, Kumquat, Grapefruit, Meyer Lemon, Sicilian Lemon, Valencia Orange, Kaffir Lime, Key Lime, Lemonade, Tangerine, Yuzu, Calamansi, Satsuma, Clementine*

## Savory

Inquire about customized mixes of savory flavors and seasoning blends.

*Pepperoni, Bacon, Sour Cream n’ Onion, Jalapeno Cheddar, Salt and Vinegar, Sriracha*

## Superfruit

A customer favorite. Use superfruit flavors such as goji berry, pomegranate, acai, or mangosteen flavors to enhance the appeal of your product.

*Goji Berry, Pomegranate, Macqui, Yumberry, Dragonfruit, Mangosteen, Yuzu, Starfruit, Acai Berry, Camu Camu Berry, Durian, Noni Fruit*

## Dairy

Our dairy line delivers intense flavors that have proven to be effective at providing maximum flavor impact and nutrition in a wide range of finished products.

*Milk, Cream, Butter, Egg, Yogurt, Buttermilk, Cream Cheese, Sour Cream, Parmesan, Sweetened Condensed Milk, Parmesan Asiago, Romano, American Cheese, Swiss Cheese, Cheddar, Mozzarella, Queso Fresco*

## Berry

Fresh-picked berry flavors, like our classic natural strawberry, can capture the juiciness of a ripe summer berry in a variety of applications.

*Strawberry, Blueberry, Mixed Berry, Black Cherry, Cranberry, Raspberry, Blackberry, Boysenberry, Wildberry, Black Currant, Lingonberry, Berry Punch, Acerola*

## Chocolate

We have a library of mouthwatering chocolate flavors designed to showcase consumer favorites in the spectrum of delicious chocolate profiles, whether you are looking for something light and creamy or dark and decadent.

*Dark Chocolate, Milk Chocolate, White Chocolate, Belgian Chocolate, Chocolate Malt, Double Chocolate Fudge, Chocolate Raspberry, Dark Chocolate Cheesecake, Milk Chocolate Brownie, Sea Salt Dark Chocolate, Chocolate Truffle*

## Tropical

Try utilizing exotic flavors such as hibiscus, guava, passion fruit, or lychee to engage consumer’s interest and palates.

*Hibiscus, Guava, Passion Fruit, Lychee, Jackfruit, Asian Pear, Papaya, Tiger’s Blood, Coconut, Star Fruit, Tropical Berry*



Our non-GMO Grain & Seed solutions are minimally processed and free of chemicals, allergens and gluten, making them the safest grain solutions on the market. From gluten-free oats to ancient food sources like quinoa, our high-quality grains will give your products outstanding safety, nutrition and flavor.



## Chia

### ChoiceChia™ MP Whole Chia

Whole seed providing time-tested nutrition, texture and visual impact. It offers good stability, is easy to use and has no dust or fines. A great source of vegetarian ALA Omega-3, fiber, protein and calcium. Processed with MicroSure™ Plus validated 5-log sterilization, it is a clean label ingredient. Available in conventional or organic, black or white varieties.

*Bakery, snacks, bars, cereals, yogurt*

### SelectChia™ MP Milled Chia

Cold milled chia seed offering high nutritional bioavailability, coarse texture and visual impact. Builds viscosity in beverages, great source of vegetarian ALA Omega-3, fiber, protein and calcium. Processed with MicroSure™ Plus validated 5-log sterilization, it is a clean label ingredient.

*Bars, beverages, snacks, cereals, bakery*

## Flax

### ChoiceGrad™ Whole Flaxseed

Whole flaxseed recognized for its superior flavor and uniform color. Seed selection meets stringent quality specifications. Whole, matured seeds are selected. Contains 100% of the nutritional value of flaxseed: high in ALA Omega-3, dietary fiber, lignans and protein. Available in regular and organic with a guaranteed shelf life of two years. Also available with MicroSure™ Plus validated 5-log sterilization.

*Bakery, snacks, bars, cereals*

### SelectGrad® Milled Flaxseed

Cold milled flaxseed provides excellent nutrition and texture with a balance of ALA Omega-3 fiber, protein and superior flavor. Coarse, regular, fine and ultrafine mills available. Available in brown, golden, conventional and organic varieties with a guaranteed shelf life of two years. Also available with MicroSure™ Plus validated 5-log sterilization.

*Bakery, bars, cereals, snacks, pasta*

## Ancient Grains

### **ChoiceQuinoa™ MP Whole White Quinoa**

Glanbia's whole quinoa is selected for its high level of purity and clean flavor. It is heat treated using Glanbia's MicroSure™ Plus process, guaranteed 5-log, 3rd-party validated kill step for food safety.

*Bars, bakery, cereals, snacks*

### **SelectQuinoa™ MP Milled White Quinoa**

A coarsely milled quinoa flour that provides the nutritional benefits of quinoa in a format that is easy to use in snack and bakery formulations. Heat treated with MicroSure™ Plus validated 5-log, 3rd-party validated kill step for food safety.

*Bars, bakery, cereals, snacks*

## Oats

### **OatPure™ Gluten-Free Oats**

With <10ppm gluten and an NSF certified gluten-free OatSecure™ closed loop supply chain process, OatPure oats are guaranteed to be gluten free. Processed in a new food safe, BRC Grade AA milling and packaging facility. Available in shredded oats, steel cut oats, quick cook oats and jumbo flakes varieties. Shelf life of 18 months.

*Bars, cereals, clusters, ready-to-drink beverages, gluten free baked goods, yogurt/dairy products*



## Functional Solutions

### BevGrad® Milled Chia & Flaxseed

BevGrad Chia is a super-finely cold milled white chia seed. It delivers smooth texture and allows for easy incorporation into powdered or liquid formulations without compromising taste or nutrition. BevGrad XtraSmooth is super-finely cold milled flaxseed with smooth texture and excellent dispersability. BevGrad XtraThick is super-fine cold milled flax powder that adds viscosity, replaces gums and provides exceptional flax nutrition.

*Ready-to-mix powders and ready-to-drink beverages*

### HarvestFiber™ Pea

Contains both soluble and insoluble fiber. Pea fiber is a clean label ingredient that bumps up the fiber content of nutritional foods. It has a clean, neutral taste that is easy to use in combination with other nutritious ingredients. Heat treated using MicroSure™ Plus technology, making it safe for ready-to-eat applications. An organic option is also available.

*Ready-to drink beverages, snacks, bars*

### OptiSol® 3000 Series

Seed and dairy-based egg replacement systems that work in a variety of applications. The series consists of OptiSol 3000, 3200, 3400 and 3900.

*OptiSol 3000: Pancakes, waffles, danish, soft cookies, gluten free muffins.*

*OptiSol 3200: Custards such as quiche and cheesecakes*

*OptiSol 3400: Muffins, brownies, creme cakes*

*OptiSol 3900: Sheet cakes, chiffon cakes, sponge cakes.*

### OptiSol® 5000 Series

An all-natural, highly functional ingredient system with strong hydrocolloid properties. When used as a replacement for fats, gums and other higher-priced ingredients, it provides an opportunity to significantly reduce costs, while maintaining great taste and texture. It works as a dough conditioner replacer and egg replacer. OptiSol 5300 is derived from flaxseed and can be used to extend shelf life, increase volume in baked goods and reduce oil uptake in fried products.

*OptiSol 5000: Baked goods, frozen batter systems, frozen dough, pasta*

*OptiSol 5300: Baked goods, flatbreads, bakery mixes, breadings, batters*

### OptiSol® 9000 Series

An ingredient with the potential to allow for 50% or more fresh meat inclusion in extruded and baked pet foods, double what can be included with today's technology. It binds with fresh meat protein to allow extrusion of high levels of fresh meat in formulations with no grain and results in high kibble durability.

*Extruded pet foods*



We offer a wide range of the essential building blocks necessary for supporting growth and development and sustaining overall health and wellness. Our complete lines of vitamins, minerals, amino acids, botanicals and herbs provide a wide spectrum of health benefits and are ideally suited for many different applications. Sourced from proven domestic and overseas manufacturing partners, all are carefully screened and quality assured.

### **Vitamins (A, B Complex, C, D, E, K)**

Essential vitamins for development, growth and maintenance.

*Tablets, capsules, soft gels, ready-to-mix powders, ready-to-drink beverages & foods*

### **Amino Acids**

Essential (BCAAs - valine, isoleucine & leucine, lysine, methionine, phenylalanine, threonine, tryptophan) and nonessential (arginine, glutamine, tyrosine, cysteine, glycine, proline, serine and ornithine) amino acids.

*Tablets, capsules, soft gels, ready-to-mix powders, ready-to-drink beverages & foods*

### **Minerals**

Essential minerals to support a healthy well being, consisting of both microminerals (zinc, selenium, chromium, copper, iron) and macrominerals (calcium, magnesium).

*Tablets, capsules, soft gels, ready-to-mix powders, ready-to-drink beverages & foods*

### **Botanicals & Herbs**

Phytochemicals from key botanical and herbal extracts like Green Tea Extract 20% Polyphenols, Natural Caffeine 98%, Ginkgo Biloba Leaf Extract 24% Flavonoids, Spirulina Powder and much more.

*Tablets, capsules, soft gels, ready-to-mix powders, ready-to-drink beverages & foods*



Our wide range of dairy-based, plant-based and functional proteins offer excellent nutritional value and superior functional properties. Our dairy-based proteins have the same ratio of micellar casein and whey protein naturally found in milk, but in process-stable, better-tasting and easier-to-use powder formats. Our range of plant proteins offer high-quality vegetarian protein without hormones, allergens or gluten. From extending shelf life, to improving flavor, texture and nutrition, our Functional Protein Solutions can improve the overall quality of a wide range of products.



## Plant-Based Proteins

### BevEdge™ Pea Protein

Patent-pending pea protein that disperses immediately, is bland for easier flavoring without typical pea notes and offers a smoother mouthfeel than conventional pea protein. Made in the USA from Canadian yellow peas, it delivers a high level of protein, a clean ingredient statement (just label it as “pea protein”), as well as kosher, non-GMO, and gluten free certification. Organic available.

*Ready-to-mix powders*

### HarvestPro™ Pea Proteins

Provides 75-85% protein. Available straight or with EasyFlav™ clean flavor technology which ensures a neutral taste profile. Allergen free, gluten free, kosher, and provides a vegetarian source of protein. Organic available.

*Bars, cereals, clusters, ready-to-mix beverages, gluten free baked goods*

### HarvestPro™ Flax Proteins

Available as Flax Protein 35 (all-natural vegetarian flax protein concentrate with 35% protein) and Flax 30 Organic (a certified organic vegetarian flax protein concentrate with 26-36% protein). Both contain ALA Omega-3 and fiber and are non-GMO, hormone free, allergen free and gluten free. MicroSure™ Plus heat treated for additional food safety. It is guaranteed shelf stable for two years.

*Beverages, bars, bakery, gluten-free foods*

### HarvestPro™ Chia Proteins

An all-natural chia protein concentrate. This vegetarian product features 30% protein, ALA Omega-3, and a high content of fiber. Non-GMO, hormone free, allergen free and gluten free. MicroSure™ Plus heat treated for additional food safety. It is guaranteed shelf stable for two years. Organic available.

*Beverages, bars, bakery, gluten-free foods*

## Dairy-Based Proteins

### Avonlac™ Whey Protein Concentrates

With protein content from 34% to 80% and straight or instantized, Avonlac is completely soluble and has a pleasant, creamy flavor.

*Infant nutrition, dairy products, ready-to-mix powders, ready-to-drink beverages, bakery*

### Solmiko Milk Protein Concentrate & Isolate

Milk protein concentrate (MPC) and milk protein isolate (MPI) are excellent sources of native casein and whey proteins that offer excellent flavor, solubility and heat stability. Solmiko milk proteins are ideally suited for applications where low micro counts, functionality and flavor are critical.

*Ready-to-drink beverages, ready-to-mix powders, sports nutrition bars and beverages, fresh dairy products*

### Provon® Whey Protein Isolates

These whey protein isolates are a highly purified, pure source of whey protein with exceptional nutritional attributes such as the full spectrum of undenatured proteins found naturally in whey. Soluble in a wide pH range, neutral flavor and available straight or instantized.

*Fortified beverages, nutrition bars, dietetic products, dairy/frozen desserts, sports beverages, nutritional dry mixes*

### Thermax® Heat Stable Whey Proteins

Heat-stable whey proteins with 34%-90% protein, designed for UHT and retort processing conditions. Manufactured from sweet whey using an ultrafiltration process.

*Ready-to-drink beverages including nutritional, sports/performance, weight management and clinical nutrition*

## Functional Solutions

### Bars

#### BarHarvest™ Plant Proteins

Plant protein-based systems (non-soy) designed to deliver protein fortification in emerging plant-based bar, cereal, and snack applications without negatively impacting texture or shelf life. Delivering a variety of textures while minimizing the dryness, brittleness and hardness over shelf life commonly associated with plant proteins.

*Nutrition bars, cereal bars, granola bars, cereal, snacks*

#### BarFlex® Whey Proteins

Whey protein systems designed to minimize bar hardening and extend the shelf life of nutrition bar applications. They give a long-lasting, chewy texture to bars.

*Nutrition and food bars, bakery products, confectionery*

## BarGAIN® Protein Blends

Unique combinations of dairy and plant protein that provide enhanced bar functionality and a complete protein solution. BarGAIN solutions create a softer texture, working to extend shelf life while providing a clean flavor profile.

*Nutrition bars, cereal bars, granola bars, bakery products, confectionery*

## BarPro™ Milk Proteins

Milk protein systems with enhanced functional characteristics designed to extend the shelf life of nutrition bars and minimize bar hardening.

*Nutrition bars, cereal bars, granola bars, bakery products, confectionery*

## Ready-To-Drink Beverages

### BevWise® Protein Systems

Protein fortification ingredient systems specifically for use in aseptic and hot-fill processing. Providing exceptional nutritional attributes and functional benefits to high, intermediate and neutral pH beverages. Benefits include superior clarity, less astringency, improved processing with better dispersion, and reduced processing time/costs.

*High acid ready-to-drink beverages, intermediate pH ready-to-drink beverages, low-acid ready-to-drink beverages*

## Ready-To-Mix Beverages

### BevEdge™ Whey Protein A-200 Series

New patent-pending BevEdge technology uses no lecithin, offering a clean label method of delivering exceptional dispersibility of proteins in ready-to-mix beverages. Applied here, the A-200 series offers instantized, pre-acidified whey protein isolates for use in high acid powdered drink mixes. With high dispersibility, clean label, clean flavor and clarity, they are the perfect solution for fruit flavored nutritional powdered drink mixes.

*High acid ready-to-mix beverages*

## Functional Dairy Systems

### OptiSol® 1000 Series

A full range of functional dairy protein ingredient systems. Benefits include improved processing and flavor, creamy texture, clean label, rBST free/Grade A options.

*High protein yogurts, dairy beverages, frozen yogurt and ice cream, dairy desserts*

### OptiSol® 2000

An innovative, patent-pending binding system that can help achieve up to a 50% sugar reduction, without sacrificing the food characteristics consumers crave. Provides clean labels, exceptional emulsification properties and outstanding nutritional value.

*Cereal clusters, chewy granola bars, baked cereal bars, snacks*



We combine the highest quality ingredients to create custom premixes that achieve optimal nutritional, functional and operational performance. We source ingredients from across the globe to ensure continuous inventory and the shortest lead times in the industry. Our collaborative R&D and innovation teams can help develop custom formulas for your specific applications. With production facilities in North America, Europe and Asia, we can deliver the simplicity, savings and reliability you need to create a successful product.

**Support - Offering Result-Driven Services**

- Experienced R&D and innovation team ready to assist in the development of your custom formulation
- Responsive sample, quote and specification turnaround
- Extensive industry market intelligence and experience to assist with product development
- Support from multiple functions including operations and production to ensure our premix is best designed for your manufacturing practices

**Simplicity - Increasing Your Efficiencies**

- Addition of a single ingredient into your production line
- Maximizing your warehouse space.
- Ability to customize packaging to your requirements
- Production facility accessible during trials
- Smaller volume commitments offered

**Savings - Reducing Your Costs**

- Reduce expenses associated with sourcing and qualifying several ingredients
- Lower testing costs for one incoming product vs. several
- Lower freight charges for one incoming product vs. several
- Eliminate costs related to holding up production while waiting on material

**Security - Reducing Your Risk**

- Experienced full-service in-house lab
- Redundant suppliers to ensure material availability and cost competitiveness
- Barcode-based quality controls and fully integrated quality management system



We can help you bring to market safe, flavorful and nutritious beverages, without the need for preservatives or refrigeration. Unlike traditional hot or cold filling, our Aseptic Beverage Manufacturing solutions make beverages safe and stable without preservatives, all while maintaining their natural taste and nutrition. From robust safety certifications, to in-house R&D, to pilot plant scale-ups, we offer everything you need to make beverages with maximum freshness, flavor and shelf life.

## Our Process

### The Concept

- Using our market knowledge and consumer insight, we'll help you develop your product positioning.

### Great Flavors

- We'll help you create a healthy, nutritious, great tasting drink for your customers.

### Long Shelf-Life. Less Risk.

- Our unique processing ensures preservative-free freshness for your drink's entire shelf-life.

### Prototyping

- At our advanced pilot plant our skilled R&D team will take your beverage from concept to reality.

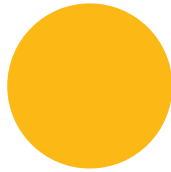
### Your Bottle

- Our blow moulding capabilities give you excellent flexibility to create a unique bottle shape.

### Your Brand

- We'll ensure your product is shrink-sleeved and packaged to your exact retail requirements.

See what's possible. Just add Glanbia.



**Glanbia Nutritionals**

hello@glanbianutritionals.com

glanbianutritionals.com