



# **Human Nutrition & Health**

**2022 Solutions Guide** 

Ingredients, Services, Technology, Inspiration

# About the Balchem Human Nutrition & Health (HNH) Solutions Guide

## Welcome to Balchem HNH





Provide a general understanding of who we are and what we value



Inspire you to engage with our expert teams of passionate people



Identify the consumer benefit of our products and resources

Balchem provides solutions that delight and nourish – from indulgence and sensory experiences to the rigors of targeted essential nutrition.

Thank you for your interest in Balchem Human Nutrition & Health. We hope to turn your curiosity into interest and inspire you to *think differently* about Balchem. Our motivated teams are ready to apply experience, expertise and creativity to help you deliver meaningful differentiation to the market. Engage with us in support of your growth.

Consumers around the world have a renewed awareness of nutrition and its impact on overall health and self-care. They view good health holistically and it includes healthy relationships, behaviors, habits and practices that support the body, the mind and the soul. Balchem can help you deliver food, beverages and dietary supplements solutions that meet consumer needs as they look for new ways to live healthier lives.

Balchem provides solutions that delight and nourish – from indulgence and sensory experiences, to the rigors of targeted essential nutrition. Engage with us to discover how our resources can enable your differentiation in the market.

### **Our Vision**

Our vision is simple – to make the world a healthier place. We continue to build a global nutrition and health company that delivers trusted, innovative and science-based solutions to our customers. To enable our vision and impact health and well-being around the world, we rely on our core values that are the foundation and the very essence of who we are and how we do business.

### **Our core values**













# Ignite Your Growth with TrenDish™



Technology & Capability Overview

We apply our expertise and enable technologies that make food, beverages and dietary supplements better. Our capabilities translate to successful innovation in market for our partners.

### Chelation

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A pioneer of chelated minerals, **Albion® Minerals** promotes optimal tolerability, giving consumers a bioavailable and digestive-friendly experience in their daily consumption. Greater bioavailability results in a more cost-effective solution for consumer packaged goods (CPG) companies, delivering a higher dose and reducing cost-in-use versus other forms.

### **Plant-based**

We provide indulgent, functional and nutritious ingredients that promote plant consumption and do not contain animal or animal-derived components, marine products, bee products or insects.

Balchem's application expertise enables development of delicious, nutritious, plant-based foods and beverages for everyone, every day.



#### Choline

Choline is an essential nutrient that our body makes in small amounts through a series of complex metabolic processes. **VitaCholine®** salts by Balchem are absorbed and converted into free choline, which the body then uses to support a healthy brain, liver and nervous system.

### **Customized Ingredient Solutions**

We provide industry differentiation by focusing on customized solutions for your unique needs. For our partners, we create personalized product concepts with consumer validation through market research. Our INhance™ Inclusions and INjoy™ Flavor Bases are unique solutions to bring forth various desired flavors, colors, textures, and aromas.

#### Extrusion

Our extruded proteins are used in bars, cereal, baked goods, meat alternatives and more to add visual appeal, texture, and to deliver the desired nutritional profile. They are used in novel ways to create on-trend products with new experiences for consumers.

### **Spray Drying**

Our spray drying expertise enables us to convert lipids into emulsified, free-flowing powders. We deliver functionality by design – our emulsified powders are multi-component systems, incorporating various functional ingredients into a stable and convenient powder form.

### Agglomeration

Through agglomeration, Balchem creates finished powders that dissolve into solution faster, without lumps. We utilize continuous and batch agglomeration technology to make ingredients or finished products less dense, more free-flowing and dispersible in liquids.

### **Encapsulation**

Encapsulation protects the encapsulate or active ingredient in order to maintain ingredient functionality and stability until the appropriate release conditions are met. Balchem encapsulates help to extend shelf life, optimize texture, maintain consistent flavor, improve production efficiency, reduce sodium, reduce food waste and enable clean labels.

# Solutions by Market Segment & Application

Balchem combines technical and manufacturing expertise to provide multi-component ingredient systems, designed for high performance and sensory experience in various applications. From indulgence to targeted nutrition, our application platforms offer proven and even customizable solutions. Here are some of the



### **Functional Food & Beverage**

With more and more consumers looking to improve their health through what they eat, foods improved with added nutrients can provide the solution. By combining high-quality nutrients with exceptional flavor and sensory profiles, you can delight consumers by delivering the wellness benefits they seek in the food, beverages and supplements they enjoy every day.



Our chelated minerals and nutrients deliver on consumer-derived wellness needs for all ages. Our functional nutritional powders, extruded crisps and proteins, and other food manufacturing capabilities provide for more novel delivery forms and formats to accommodate consumers looking for nutrition outside of a pill or capsule.

#### **Medical Food**

Our nutrients, flavor and sensory technologies enable medical foods to be specially formulated to help manage conditions with nutritional needs that cannot be met by normal diet alone.



### Beverage

We deliver convenience, quality and efficiency through integrated technologies of dry and liquid blending, spray drying, instantizing and agglomeration. Our beverage systems and functional bases bring both taste and nutrition to your innovations.

### **Nutritional & Protein Bars**, **Snacks & Cereal Systems**

Our functional nutritional powders and extruded proteins are excellent ingredients to create new or improve existing products. We offer powders and extruded proteins that add nutrition, support your marketing label claims, provide a functional benefit, and add texture, flavor and color.

#### **Bakery & Desserts**

Our encapsulated products deliver tangible improvements in finished product quality and shelf life. We offer high-performance inclusions that deliver on flavor, texture, color and appearance, and can create customized consumer trend-driven baked goods. Our spray dried and agglomerated powders are used in baking mixes and are also available in plant-based solutions. Enhance protein content in your baked goods with our extruded protein line of **Z-Crisps®**.

### Frozen Desserts, Ice Cream, **Novelties & Cultured Dairy**

A Balchem specialty is creating best-in-class flavor and sensory systems. We offer targeted nutritional blends to customize and create consumer trend-driven food products.

### Confectionery

Balchem specializes in the development and delivery of encapsulated solutions for top confectionery manufacturers. We provide a unique blend of technical expertise and problem-solving support. ConfecShure® encapsulated ingredients let you control the release of acid or sugar using our proprietary microencapsulation technology. We protect ingredients from degradation and premature reactions, strategically delivering them for optimum performance.

### Savory, Meat & Plant-Based Applications

Our fat-based and protein powders can be used in soups, sauces, gravies, ready meals and more. Our protein crisps and texturized vegetable proteins can be used in savory applications to enhance texture, deliver nutrition, improve the sensory experience and create alternatives to meat in plant-based formats. The encapsulation technology enables better processing in the meat industry. Our inclusions are sweet or savory, with customizable color, flavor, size, texture and labeling. They can also come in plant-based versions to deliver the taste and experience of meat and dairy.

#### **Infant Nutrition**

Balchem is helping babies get a smart start through better nutrition. VitaCholine® is the gold standard in choline supplementation. Choline is an essential nutrient, critical for both prenatal vitamins and infant formula to help ensure proper brain health and development.

## Product Index

## **Minerals & Nutrients**

### VitaCholine®

VitaCholine® is the premier source of choline, made to the highest standards to deliver relevant and compelling health benefits to consumers. VitaCholine is used in infant formula, prenatal multivitamins, fortified foods and many other products. It is the first and only choline to participate in the USP Verified Dietary Ingredient program, an independent organization that works with manufacturers to demonstrate the quality of their dietary ingredients. The Non-GMO Project, a third party non-GMO verification program, reviews our products to ensure we deliver the standard consumers expect.



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Product Family	Product Form	Product Code
VitaCholine® Choline	Choline Chloride USP/FCC	F6522120
Chloride	Choline Chloride 1% Conditioned	F6524120
VitaCholine® Choline	Choline L(+) Bitartrate – regular	F6492120
Bitartrate	Choline L(+) Bitartrate – conditioned reg	F6512120
	Choline L(+) Bitartrate – conditioned 20-mesh	F6502120
	Choline L(+) Bitartrate – conditioned 40-mesh	F6472120
	Choline L(+) Bitartrate – conditioned 60-80-mesh	F6672118
VitaCholine® Choline	Choline Dihydrogen Citrate – regular	F4532120
Dihydrogen Citrate	Choline Dihydrogen Citrate – conditioned	F4562120
VitaCholine®	VitaShure® Choline B60 (Microencapsulate)	F4005017
Microencapsulated	VitaShure® Choline B90 (Microencapsulate)	F4007017
	VitaCholine® B90 IP (Non GMO Microencapsulate)	F4004017

### **VitaShure®**

VitaShure® products utilize our proprietary encapsulation technology to offer controlled delivery of various nutrients. By providing a protective coating around active ingredients, our encapsulates allow the consumer to enjoy multiple sensory and functional benefits including taste-masking, protection from undesired ingredient interactions and sustained release profiles for targeted delivery applications. Our VitaShure products give you greater control over the protection and release of nutrient blends, ultimately creating an optimized experience for the consumer.

Product Family	Product Form	Product Code
VitaShure® Encapsulated	VitaShure® 157, Encapsulated Ascorbic Acid	F4157017
Nutrients	VitaShure® 160, Encapsulated Ascorbic Acid	F4160017
	VitaShure® 300, Encapsulated Caffeine	F4300017
	VitaShure® Caffeine SR, Encapsulated Caffeine	D4006217
	VitaShure® 484, Encapsulated Ferrous Sulfate	F4484017
	VitaShure® 664, Encapsulated Dipotassium Phosphate	F4664017









Product Family	Product Form	Product Code
Boron	Bororganic Glycine	03508
Calcium	Calci-K <sup>®</sup> (Calcium Potassium Phosphate Citrate)	04500
	CalActiv <sup>™</sup> (Calcium Bisglycinate Chelate)	03450
	CalActiv™ (Calcium Bisglycinate Chelate Buffered)	03534
	CalActiv <sup>™</sup> (Calcium Bisglycinate Chelate Granular)	03453
	Calcium Bisglycinate Chelate Taste Free	03460
	Calcium Citrate Malate	04055
	Calcium Citrate Malate C	04058
	DimaCal® (Dicalcium Malate)	04050
	DimaCal® Granular (Dicalcium Malate Granular)	04049
	DimaCal® Tabletable (Dicalcium Malate Tabletable)	04048
Chromium	Chromium Nicotinate Glycinate Chelate	03492
Copper	Copper Bisglycinate Chelate	03502
Creatine	Creatine MagnaPower® (Magnesium Creatine Chelate)	03465
Iron	Ferrochel® (Ferrous Bisglycinate Chelate)	03509
	Iron Taste Free	03466

Product Family	Product Form	Product Code
Magnesium	DiMagnesium Malate	04051
	DiMagnesium Malate Granular	04052
	Magnesium Aspartate	03544
	MetaMag® (Magnesium Bisglycinate Chelate)	03476
	MetaMag® (Magnesium Bisglycinate Chelate Buffered)	03451
	MetaMag® (Magnesium Bisglycinate Chelate Buffered Granular)	03951
	MetaMag <sup>®</sup> (Magnesium Bisglycinate Chelate Granular)	03477
	Magnesium Bisglycinate Chelate Taste Free	03461
	MetaMag® MGG (Magnesium Glycinate Glutamine Chelate)	03527
	MetaMag® MLG (Magnesium Lysinate Glycinate Chelate)	03500
	MetaMag <sup>®</sup> MLG (Magnesium Lysinate Glycinate Chelate Granular)	03499
Manganese	Manganese Bisglycinate Chelate	03505
Molybdenum	Molybdenum Glycinate Chelate	03526
Potassium	Potassium Glycinate Complex	03145
Selenium	Selenium Glycinate	03522
Vanadium	Vanadium Nicotinate Glycinate Chelate	03518
Zinc	Zinc Arginate Chelate	03516
	Z-Life <sup>™</sup> (Zinc Bisglycinate Chelate)	03506
	Zinc Max <sup>™</sup> (Zinc Bisglycinate Chelate)	03530
	Zinc Bisglycinate Chelate Taste Free	03463





### **Beverages**

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients			
Dairy-Based							
QuIC Milk F 102MLKF-50	1%	Low sodium, cholesterol Good Source: protein	Foam-dried milk powder	Nonfat milk			
Quali Cream™ 7211 1017211-50	73%	Good source: protein, potassium, choline, vitamin E, panthenic acid Excellent source: vitamins A & B12, calcium, riboflavin, phosphorus	Enhances creaminess, mouthfeel and opacity	Cream, nonfat dry milk, dipotassium phosphate, silicon dioxide			
			Palm-Based				
QuIC Creamer <sup>™</sup> 2010 169710	20%	Low sodium Good source: potassium High source: phosphorus	Adds opacity and mouthfeel Lactose-free Pleasant dairy/cream flavor	Corn syrup solids, palm oil, contains 2% or less of each of the following: dipotassium phosphate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), titanium dioxide (color), sodium aluminosilicate, sodium caseinate, DATEM, sodium tripolyphosphate, natural and artificial flavor, beta carotene (color), riboflavin (color)			
Jerzee" 31-Palm NT 170706-MB	31%	Low sodium Good source: potassium High source: vitamin B2, phosphorus	Enhance mouthfeel Adds slight sweet and dairy notes buffering capacity	Corn syrup solids, palm oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate, artificial flavor, riboflavin (for color)			
QuIC Creamer <sup>™</sup> 3301 NPH 1043301-NPH	34%	Low cholesterol Good source: potassium Excellent source of phosphorus	Adds creaminess, opacity and mouthfeel	Maltodextrin, palm oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), sodium aluminosilicate, natural flavor, annatto extract (for color), sodium hexametaphosphate			
QuIC Creamer <sup>™</sup> 3813 172705-1200-EXP	39%	Low sodium Good source: potassium High source: phosphorus	Lactose-free. Adds opacity, mouthfeel Pleasant dairy flavor	Corn syrup solids, palm oil, sodium caseinate, contains 2% or less of each of the following: dipotassium phosphate, sugar, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), silicon dioxide, natural and artificial flavors			
VitalBlend™ Organic Pea IV 175750-MB	49%	Good source: phosphorus High source: protein, copper, zinc, iron	Organic, suitable in pH neutral applications Enhances texture, viscosity and mouthfeel	Organic palm oil, organic rice syrup solids, organic pea protein, contains 2% or less of each of the following: silicon dioxide, organic sunflower lecithin			
Jerzee <sup>™</sup> 50 Palm 175705	50%	Low sodium, cholesterol	Adds opacity and mouthfeel Lactose-free Less saturated fat than coconut oil	Palm oil, corn syrup solids, sodium caseinate, mono- and diglycerides, sodium aluminosilicate (flow agent), and BHT added to help protect flavor			
Richmix® 4803 175748-50	50%	High source: chromium	Palm oil lower in saturated fat than coconut oil Adds opacity and creaminess Well-buffered Lactose-free	Palm oil, corn syrup solids, contains 2% or less of each of the following: sodium caseinate, mono- and diglycerides, sodium citrate, salt, dipotassium phosphate, sodium aluminosilicate, carrageenan, natural flavor			
QuIC Creamer <sup>™</sup> 7351 1047351-50	72%	Low sodium, cholesterol Excellent source: phosphorus, potassium	Adds creaminess, opacity and mouthfeel Buffering capacity	Palm oil, corn syrup solids, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate			
Centennial <sup>™</sup> 73-Palm NTHB 178710	74%	High source: potassium, phosphorus	Highly buffered Enhances mouthfeel and opacity	Palm oil, maltodextrin, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium hexametaphosphate, silicon dioxide			
Centennial™ 75 Palm NP 178705	75%	Low sodium	Suitable in acidic to neutral pH Enhances mouthfeel and opacity	Palm oil, maltodextrin, modified food starch, and sodium aluminosilicate (flow agent)			

### **Beverages** continued

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients			
Coconut-Based							
VitalBlend** Oat 1703NG 169381-50	17%	Good source: potassium High source: fiber Excellent source: protein, zinc, calcium, vitamins A & D, folate, phosphorus, magnesium, iron	Low opacity Suitable in acidic–neutral pH applications Enhances mouthfeel	Tapioca maltodextrin, chickpea protein concentrate, coconut oil, soluble tapioca fiber, oat bran, calcium carbonate, salt, natural flavor, silicon dioxide, vitamin A palmitate, vitamin D3			
Jerzee <sup>™</sup> 20 Coconut Ntlp2 169355	20%	Low sodium High source: potassium, phosphorus	Lactose-free Adds whitening and opacity Pleasant dairy flavor	Corn syrup solids, coconut oil, dipotassium phosphate, sodium caseinate, titanium dioxide, silicon dioxide (flow agent), mono- and diglycerides, turmeric and annatto extracts, and artificial flavor			
Cocoa Riche 800 Coconut NF 170325	30%	Low sodium High source: phosphorus Good source: potassium	Low-density foaming creamer – foams when added to solution Buffering capacity	Corn syrup solids, coconut oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, silicon dioxide, turmeric and annatto extracts (for color)			
QuIC Creamer <sup>™</sup> 3004 1043004-50	35%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Corn syrup solids, coconut oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate			
QuIC Creamer <sup>™</sup> 3005 1043005-50	35%	Low sodium, Low cholesterol Good source: phosphorus	Versatile powdered creamer	Corn syrup solids, coconut oil, sodium caseinate, dipotassium phosphate, contains 2% or less of each of the following: mono- and diglycerides, sodium aluminosilicate			
Richmix® LD-23 Non-Dairy Creamer NPH 6605-NPH	35%	Low sodium Good source: phosphorus Excellent source: potassium	Low-density powdered creamer	Corn syrup solids, hydrogenated coconut oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate, soy lecithin, natural and artificial flavor, annatto (for color)			
Richmix® 4807 175404-50	47%	Good source: potassium High source: phosphorus	Enhances mouthfeel, opacity, creaminess Sweet dairy flavor	Hydrogenated coconut oil, corn syrup solids, sodium caseinate, dipotassium phosphate, contains 2% or less of each of the following: sugar, mono- and diglycerides, sodium aluminosilicate, sodium stearoyl lactylate, soy lecithin, artificial flavor, annatto and turmeric extracts (color)			
QuIC Creamer <sup>™</sup> 4803 1044803-50	48%	Low cholesterol Good source: protein, potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, dipotassium phosphate, sugar, mono- and diglycerides, sodium aluminosilicate, tetrasodium pyrophosphate, soy lecithin			
Jerzee™ CWS - 80Bx Sc 199663	49%	Low sodium High source: calcium, phosphorus	Suitable in acidic–neutral pH ranges Enhances mouthfeel	Coconut oil, maltodextrin, modified food starch, contains 2% or less of the following: mono- and diglycerides, tricalcium phosphate (flow agent)			
QuIC Creamer <sup>™</sup> 5000 1045000-50	49%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, dipotassium phosphate, mono- and diglycerides, silicon dioxide			
QuIC Creamer <sup>™</sup> 5004 1045004-50	49%	Low cholesterol	Adds creaminess, opacity, mouthfeel	Coconut oil, corn syrup solids, sodium caseinate, sodium citrate, mono- and diglycerides, salt, sodium aluminosilicate			
QuIC Creamer <sup>™</sup> 5201 NPH 1045201-NPH	49%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), dipotassium phosphate, silicon dioxide			
Jerzee™ 50 Coconut IP 199710	50%	Low sodium	Enhances mouthfeel	Coconut oil, maltodextrin, sodium caseinate, mono- and diglycerides (with citric acid to preserve freshness), silicon dioxide			
Jerzee <sup>™</sup> Blend 22007-Coconut A 175345	50%	Low sodium Good source: potassium High source: phosphorus	Enhances mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, sodium aluminosilicate			
Jerzee <sup>®</sup> Blend C 175300	50%	Good source: potassium High source: phosphorus,	Enhances mouthfeel Buffering capacity Adds slight sweet and dairy notes	Coconut oil, corn syrup solids, potassium caseinate, sugar, dipotassium phosphate, mono- and diglycerides, salt, sodium stearoyl lactylate, carrageenan, sodium aluminosilicate, artificial flavor, annatto and turmeric extracts (for color)			

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients
		Сосо	nut-Based continued	
lerzee <sup>™</sup> Blend Ndb 50 Lb Bag 175305	50%	Low sodium, Low cholesterol Good source: phosphorus, potassium	Versatile powder that can be used in hot and cold applications	Coconut oil, corn syrup solids, sodium caseinate, sugar, dipotassium phosphate, propylene glycol esters of fatty acids, mono- and diglycerides, sodium aluminosilicate, salt, soy lecithin, calcium carrageenan, artificial flavor and color
VitalBlend* Coconut 5001 // 175403-50	50%	Low sodium Good source: vitamin D, potassium Excellent source: calcium, iron	Suitable in acidic–neutral pH applications No added sugar Enhances mouthfeel	Coconut oil, acacia gum
VitalBlend™ Pea VI IP 175392-50	50%	Excellent source: protein, fiber, calcium, selenium, iron, phosphorus	Suitable in neutral pH ranges Enhances mouthfeel	Coconut oil, inulin, pea protein isolate, sodium citrate, sunflower lecithin, tricalcium phosphate
VitalBlend <sup>™</sup> Organic Pea XI 175394-40	50%	Excellent source: protein, calcium, phosphorus, copper, zinc, iron	Organic suitable in neutral pH Enhances viscosity, texture, mouthfeel	Organic coconut oil, organic rice syrup solids, organic pea protein, sodium citrate, tricalcium phosphate, organic sunflower lecithin
VitalBlend* Oat 5001 NG 175772-50	50%	Good source: potassium, iron High source: fiber Excellent source: protein, folate, magnesium, phosphorus, zinc	Lactose-free Suitable in acidic–neutral pH ranges Enhances mouthfeel	Coconut oil, chickpea protein concentrate, tapioca maltodextrin, cocoa butter, oat bran, soluble tapioca fiber, silicon dioxide, salt, natural flavor
Richmix® B1 MD SI NPH 18871-NPH	50%	Good source: phosphorus, calcium, iron, potassium	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Coconut oil, maltodextrin, sodium caseinate, dipotassium phosphate, mono- and diglycerides (with citric acid to preserve freshness), silicon dioxide, soy lecithin
Richmix <sup>®</sup> B-1 NPH 5100-NPH	50%	Low sodium  Excellent source: potassium, phosphorus	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Hydrogenated coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, sodium aluminosilicate, soy lecithin
Richmix <sup>®</sup> A NPH 5098-NPH	52%	Good source: phosphorus High source: vitamins B2 & B12, potassium	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Hydrogenated coconut oil, corn syrup solids, sodium caseinate, sugar, dipotassium phosphate, propylene glycol esters of fatty acids, mono- and diglycerides, sodium aluminosilicate, salt, soy lecithin, carrageenan, natural and artificial flavors, annatto (for color)
Richmix® A Non-Hydro NPH 98446-NPH-50	53%	High source: vitamins B2, B12 & D Good source: potassium, phosphorus	Enhances opacity Enhances mouthfeel, creaminess	Coconut oil, corn syrup solids, sodium caseinate, sugar, dipotassium phosphate, silicon dioxide, propylene glycol esters of fatty acids, mono- and diglycerides, salt, soy lecithin, carrageenan, natural and artificial flavors, annatto (for color)
QuIC Creamer™ 7170 1047170-50	71%	Low sodium, Low cholesterol	Adds creaminess	Coconut oil, maltodextrin, modified food starch, mono- and diglycerides, silicon dioxide, hydrogenated palm oil
Centennial™ II Coconut 178310	73%	Low sodium	Enhances mouthfeel, opacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, sodium aluminosilicate
Centennial <sup>™</sup> 73 Coconut IP2 178316-40	73%	Low sodium, Low cholesterol Good source: phosphorus	Versatile high-fat powder	Coconut oil, maltodextrin, sodium caseinate, mono- and diglycerides, dipotassium phosphate, silicon dioxide (anticaking agent)
Centennial <sup>™</sup> l Coconut 178301	74%	Low sodium High source: phosphorus Good source: potassium, protein	Enhances mouthfeel, opacity Buffering capacity	Coconut oil, lactose, sodium caseinate, dipotassium phosphate, silicon dioxide
Centennial <sup>™</sup> 75 Coconut CL2 178325	75%	Low sodium High source: fiber Good source: protein	Enhances mouthfeel, opacity	Coconut oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide
Centennial <sup>™</sup> <b>7508 NG</b> 178332-50	75%	Low sodium Good source: protein High source: fiber	Mid-mouthfeel High opacity Neutral pH stability	Coconut oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide
VitalBlend <sup>™</sup> Coconut II 178326	75%	Low sodium Good source: protein High source: fiber	Lactose-free Digestive health + prebiotic fiber Suitable in neutral pH ranges Enhances mouthfeel	Coconut oil, inulin, sodium caseinate, sunflower lecithin, silicon dioxide





### **Beverages** continued

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients				
	Sunflower-Based							
Jerzee" CWS 80-Bxs 175620	49%	Low sodium Good source: phosphorus High source: vitamin E, calcium	High solubility/cold water soluble Suitable in acidic–neutral pH ranges High oleic/unsaturated oil Enhances mouthfeel	Sunflower oil (with natural tocopherols), maltodextrin, modified food starch, mono- and diglycerides, tricalcium phosphate				
Jerzee" CWS 50-Sunflower NP IP 175636	50%	Low sodium High source: vitamin E, calcium, phosphorus	High solubility/cold water soluble Suitable in acidic-neutral pH ranges High oleic/unsaturated oil Enhances mouthfeel	Sunflower oil (with tocopherols), maltodextrin, modified food starch, mono- and diglycerides (with citric acid to preserve freshness), tricalcium phosphate				
Jerzee™ CWS 50-Sunflower IP3 175637	50%	Low sodium Good source: phosphorus High source: vitamin E, calcium	Enhances mouthfeel High oleic/unsaturated oil	Sunflower oil, maltodextrin, sodium caseinate, mono- and diglycerides (with citric acid to preserve freshness), tocopherols, tricalcium phosphate				
Jerzee™ CWS 80-Bx 175615	50%	Low sodium Good source: phosphorus High source: vitamin E, calcium	High solubility/cold water soluble High oleic/unsaturated oil Enhances mouthfeel	High oleic sunflower oil, maltodextrin, sodium caseinate, mono- and diglycerides, natural tocopherols, tricalcium phosphate				
Jerzee <sup>™</sup> 50-Sunflower Cl3 175630	50%	Good source: phosphorus, potassium, vitamin E	Certified Kosher Dairy Low-density powder with good dispersion in cold/hot application	High oleic sunflower oil, maltodextrin, sodium caseinate, dipotassium phosphate, soy lecithin, silicon dioxide (flow agent), natural tocopherols				
Richmix® HO Sun 50-Nt NPH 18313-NPH	50%	Low sodium High source: vitamin B2, protein, calcium, potassium, phosphorus	Good whitening	Sunflower oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, tricalcium phosphate, soy lecithin, tocopherols				
Richmix® Sun 50 MD Base NPH 17922-NPH	50%	Good source: vitamin E, phosphorus Excellent source: potassium	Low-density	Sunflower oil, maltodextrin, sodium caseinate, mono- and diglycerides, dipotassium phosphate, soy lecithin, sodium aluminosilicate, tocopherols				
VitalBlend** Organic Pea X 175647-40	50%	High source: protein, calcium, phosphorus, copper, iron, zinc	Lactose-free Organic Suitable in pH neutral applications Enhances texture, viscosity and mouthfeel	Organic high oleic sunflower oil, organic rice syrup solids, organic pea protein, contains 2% or less of each of the following: sodium citrate, organic sunflower lecithin, tricalcium phosphate				
VitalBlend <sup>®</sup> Nutra Base NPH 19096-NPH-40	52%	Good source: potassium, vitamin B1, zinc Excellent source: protein, vitamins B2, B12 & E, phosphorus	Lactose-free Suitable in neutral pH High opacity, mouthfeel	High oleic sunflower oil, sodium caseinate, mono- and diglycerides, dipotassium phosphate, silicon dioxide, soy lecithin, tocopherols				
VitalBlend <sup>™</sup> Sunflower IP 178651-50	75%	Low sodium Good source: protein High source: fiber Excellent source: vitamin E	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	High oleic sunflower oil, inulin, sodium caseinate, sunflower lecithin, silicon dioxide, mixed tocopherols				
Centennial <sup>™</sup> IX Sunflower 178623	75%	Low sodium High source: vitamin E	Sugar- and lactose-free Starch-based No Maillard browning Tolerates low pH applications	Sunflower oil, modified food starch, maltodextrin, sodium aluminosilicate as anti-caking agent, natural tocopherols				

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients
			MCT-Based	
VitalBlend <sup>™</sup> MCT 5000 175758-50	51%	Low sodium Good source: vitamin B2, calcium Excellent source: potassium	Suitable in neutral pH ranges Dairy-based protein with lactose Enhances mouthfeel	Medium-chain triglycerides, tapioca maltodextrin, nonfat dry milk, potassium citrate, silicon dioxide (flow agent)
Richmix® 5025 IP 175755-50	52%	Low sodium Good source: iron, calcium Excellent source: fiber	Contributes to aeration, volume, structure, stability Enhances texture, mouthfeel	Medium-chain triglycerides, maltodextrin, acacia gum, silicon dioxide, sunflower lecithin
VitalBlend <sup>™</sup> MCT NG XII 178726-50	72%	Low sodium High source: fiber Good source: protein	Lactose-free Stable in neutral pH applications Enhances mouthfeel	Medium-chain triglycerides, inulin, sodium caseinate, silicon dioxide, sunflower lecithin
VitalBlend <sup>™</sup> MCT NG 178703	73%	Good source: vitamin B12 Excellent source: protein, vitamin B2, phosphorus	Lactose-free High mouthfeel Suitable in neutral pH ranges High opacity, viscosity	Medium-chain triglycerides, sodium caseinate, silicon dioxide, sunflower lecithin
VitalBlend <sup>™</sup> MCT 7506 178731-50	75%	High protein Good source: phosphorus High source: vitamins B2 & B12	Sugar-free 95% C:8 MCT oil Adds opacity and mouthfeel	Medium-chain triglycerides, sodium caseinate
VitalBlend <sup>™</sup> MCT 7510 NG 178734-50	75%	Low sodium Good source: protein High source: fiber Excellent source: choline	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	Medium-chain triglycerides, soluble tapioca fiber, sodium caseinate, choline chloride, silicon dioxide, sunflower lecithin
Centennial" 75 MCT CI 178715	75%	Low sodium High source: fiber	Sugar-free Medium-chain triglycerides with palm, palm kernel, and/or coconut-based fatty acids	Medium-chain triglycerides, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide (flow agent)
Centennial" <b>7506</b> 175764-50	75%	Low sodium Good source: protein High source: fiber	Adds opacity, mouthfeel Sugar-free	Coconut oil, avocado oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide, mixed tocopherols, rosemary extract, sunflower oil
			Avocado-Based	
VitalBlend <sup>™</sup> Avocado IP II 175767-50	50%	Low sodium Good source: magnesium, potassium Excellent source: calcium, iron	Suitable in acidic–neutral pH applications Cold water solubility Low protein, sugar Enhances mouthfeel	Avocado oil, acacia gum, silicon dioxide, sunflower lecithin, mixed tocopherols, rosemary extract, sunflower oil
			Olive-Based	
VitalBlend <sup>™</sup> Olive 7500 178742-50	75%	Low sodium Good source: protein High source: fiber Excellent source: vitamin E	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	Extra virgin olive oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide, tocopherols
			Safflower-Based	
Centennial" 73 Safflower Cl 178625	70%	Good source: protein, selenium High source: vitamins B2 & B12, calcium, phosphorus	High-fat product with high oleic safflower oil Adds opacity, mouthfeel Higher protein level for better emulsion stability	Safflower oil with tocopherols, nonfat dry milk, disodium phosphate, silicon dioxide (flow agent), natural flavor



### Savory

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients
			Dairy-Based	
Quali Cream <sup>™</sup> 7211 1017211-50	73%	Good source: protein, potassium, choline, vitamin E, panthenic acid Excellent source: vitamins A & B12, calcium, riboflavin, phosphorus	Enhances creaminess, mouthfeel, opacity	Cream, nonfat dry milk, dipotassium phosphate, silicon dioxide
			Palm-Based	
QuIC Creamer** 2010 169710	20%	Low sodium Good source: potassium High source: phosphorus	Adds opacity and mouthfeel Lactose-free Pleasant dairy/cream flavor	Corn syrup solids, palm oil, contains 2% or less of each of the following: dipotassium phosphate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), titanium dioxide (color), sodium aluminosilicate, sodium caseinate, DATEM, sodium tripolyphosphate, natural and artificial flavors, beta carotene (color), riboflavin (color)
Jerzee* 31-Palm NT 170706-MB	31%	Low sodium Good source: potassium High source: vitamin B2, phosphorus	Enhances mouthfeel Adds slight sweet and dairy notes Buffering capacity	Corn syrup solids, palm oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate, artificial flavor, riboflavin (for color)
QuIC Creamer™ 3301 NPH 1043301-NPH	34%	Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel	Maltodextrin, palm oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), sodium aluminosilicate, natural flavor, annatto extract (for color), sodium hexametaphosphate
VitalBlend" Organic Pea IV 175750-MB	49%	Good source: phosphorus High source: protein, copper, zinc, iron	Organic Suitable in pH neutral applications Enhances texture, viscosity, mouthfeel	Organic palm oil, organic rice syrup solids, organic pea protein, contains 2% or less of each of the following: silicon dioxide, organic sunflower lecithin
Jerzee <sup>™</sup> 50 Palm 175705	50%	Low sodium, Low cholesterol	Adds opacity, mouthfeel Lactose-free Less saturated fat than coconut oil	Palm oil, corn syrup solids, sodium caseinate, mono- and diglycerides, sodium aluminosilicate (flow agent), BHT added to help protect flavor
Richmix* 4803 175748-50	50%	High source: chromium	Lower in saturated fat than coconut oil Adds opacity, creaminess Well-buffered Lactose-free	Palm oil, corn syrup solids, contains 2% or less of each of the following: sodium caseinate, mono- and diglycerides, sodium citrate, salt, dipotassium phosphate, sodium aluminosilicate, carrageenan, natural flavor
Richmix® 5027 175754-MB-50	50%	Good source: protein, molybdenum High source: potassium, phosphorus	Adds opacity, mouthfeel	Palm oil, corn syrup solids, sodium caseinate, mono- and diglcerides, dipotassium phosphate, contains 2% or less of each of the following: sodium aluminosilicate, soy lecithin
QuIC Creamer <sup>™</sup> 7351 1047351-50	72%	Low sodium, Low cholesterol Excellent source: phosphorus, potassium	Adds creaminess, opacity, mouthfeel Buffering capacity	Palm oil, corn syrup solids, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate
Centennial™ 7307 178721	73%	Low sodium High source: phosphorus	Lower saturated fat than coconut oil Adds opacity and mouthfeel Lactose-free	Palm oil, corn syrup solids, sodium caseinate, contains 2% or less of each of the following: dipotassium phosphate, monoglycerides, sodium aluminosilicate (anti-caking agent)
Centennial <sup>™</sup> 73-Palm NTHB 178710	74%	High source: potassium, phosphorus	Highly buffered Enhances mouthfeel and opacity	Palm oil, maltodextrin, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium hexametaphosphate, silicon dioxide
Centennial <sup>™</sup> 75 Palm NP 178705	75%	Low sodium	Suitable in acidic–neutral pH ranges Enhances mouthfeel and opacity	Palm oil, maltodextrin, modified food starch, sodium aluminosilicate (flow agent)

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Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients
			Coconut-Based	
VitalBlend <sup>™</sup> Oat 1703NG 169381-50	17%	Good source: potassium High source: fiber Excellent source: protein, zinc, calcium, vitamins A & D, folate, phosphorus, magnesium, iron	Low opacity Suitable in acidic or neutral pH applications Enhances mouthfeel	Tapioca maltodextrin, chickpea protein concentrate, coconut oil, soluble tapioca fiber, oat bran, calcium carbonate, salt, natural flavor, silicon dioxide, vitamin A palmitate, vitamin D3
Cocoa Riche 800 Coconut NF 170325	30%	Low sodium Good source: potassium High source: phosphorus	Low-density foaming creamer – produces foam when added to solution Buffering capacity	Corn syrup solids, coconut oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, silicon dioxide, turmeric and annatto extracts (for color)
QuIC Creamer <sup>™</sup> 3004 1043004-50	35%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Corn syrup solids, coconut oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate
Richmix® LD-23 Non-Dairy Creamer NPH 6605-NPH	35%	Low sodium Good source: phosphorus Excellent source: potassium	Low-density powdered creamer	Corn syrup solids, hydrogenated coconut oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate, soy lecithin, natural and artificial flavor, annatto (for color)
Jerzee™ CWS - 80Bx Sc 199663	49%	Low sodium High source: calcium, phosphorus	Suitable in acidic–neutral pH ranges Enhances mouthfeel	Coconut oil, maltodextrin, modified food starch, contains 2% or less of the following: mono- and diglycerides, tricalcium phosphate (flow agent)
QuIC Creamer <sup>™</sup> 5000 1045000-50	49%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, dipotassium phosphate, mono- and diglycerides, silicon dioxide
QuIC Creamer <sup>™</sup> 5004 1045004-50	49%	Low cholesterol	Adds creaminess, opacity, mouthfeel	Coconut oil, corn syrup solids, sodium caseinate, sodium citrate, mono- and diglycerides, salt, sodium aluminosilicate
QuIC Creamer <sup>™</sup> 5201 NPH 1045201-NPH	49%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), dipotassium phosphate, silicon dioxide
Jerzee <sup>™</sup> 50 Coconut IP 199710	50%	Low sodium Good source: iodine	Enhances mouthfeel	Coconut oil, maltodextrin, sodium caseinate, mono- and diglycerides (with citric acid to preserve freshness), silicon dioxide
Jerzee <sup>™</sup> Blend 22007-Coconut A 175345	50%	Low sodium Good source: potassium High source: phosphorus	Enhances mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, sodium aluminosilicate
Jerzee <sup>™</sup> Blend C 175300	50%	Good source: potassium High source: phosphorus	Enhances mouthfeel Buffering capacity Adds slight sweet and dairy notes	Coconut oil, corn syrup solids, potassium caseinate, sugar, dipotassium phosphate, mono- and diglycerides, salt, sodium stearoyl lactylate, carrageenan, sodium aluminosilicate, artificial flavor, annatto and turmeric extracts (for color)
Richmix® B-1 NPH 5100-NPH	50%	Low sodium Excellent source: potassium, phosphorus	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Hydrogenated coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, sodium aluminosilicate, soy lecithin
Richmix® B1 MD SI NPH 18871-NPH	50%	Good source: phosphorus, calcium, iron, potassium	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Coconut oil, maltodextrin, sodium caseinate, dipotassium phosphate, mono- and diglycerides (with citric acid to preserve freshness), silicon dioxide, soy lecithin
VitalBlend <sup>™</sup> Oat 5001 NG 175772-50	50%	Good source: potassium, iron High source: fiber Excellent source: protein, folate, magnesium, phosphorus, zinc	Lactose-free Suitable in acidic–neutral pH ranges Enhances mouthfeel	Coconut oil, chickpea protein concentrate, tapioca maltodextrin, cocoa butter, oat bran, soluble tapioca fiber, silicon dioxide, salt, natural flavor
Richmix® A NPH 5098-NPH	52%	Good source: phosphorus High source: vitamins B2 & B12, potassium	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Hydrogenated coconut oil, corn syrup solids, sodium caseinate, sugar, dipotassium phosphate, propylene glycol esters of fatty acids, mono- and diglycerides, sodium aluminosilicate, salt, soy lecithin, carrageenan, natural and artificial flavors, annatto (for color)

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### **Savory** continued

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients
		Coco	nut-Based continued	
QuIC Creamer™ 7170 1047170-50	71%	Low sodium, Low cholesterol	Adds creaminess	Coconut oil, maltodextrin, modified food starch, mono- and diglycerides, silicon dioxide, hydrogenated palm oil
Centennial™ II Coconut 178310	73%	Low sodium	Enhances mouthfeel, opacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, sodium aluminosilicate
Centennial <sup>™</sup> 73 Coconut IP2 178316-40	73%	Low sodium, Low cholesterol Good source: phosphorus	Versatile high-fat powder	Coconut oil, maltodextrin, sodium caseinate, mono- and diglycerides, dipotassium phosphate, silicon dioxide (anticaking agent)
Centennial™ I Coconut 178301	74%	Low sodium Good source: potassium, protein High source: phosphorus	Enhances mouthfeel, opacity Buffering capacity	Coconut oil, lactose, sodium caseinate, dipotassium phosphate, silicon dioxide
Centennial <sup>™</sup> 75 Coconut CL2 178325	75%	Low sodium Good source: protein High source: fiber	Enhances mouthfeel, opacity	Coconut oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide
Centennial* <b>7506</b> 175764-50	75%	Low sodium Good source: protein High source: fiber	Adds opacity, mouthfeel Sugar-free	Coconut oil, avocado oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide, mixed tocopherols, rosemary extract, sunflower oil
<b>Centennial" 7505</b> 178333	75%	Low sodium, Good source: fiber, potassium, vitamin B2, calcium Excellent source: protein, vitamin B12, phosphorus	Clean label protein Primarily saturated fat source Enhances texture Inhibits moisture migration	Coconut oil, whey protein concentrate, soluble corn fiber, contains 2% or less of each of the following: dipotassium phosphate
Centennial™ 7508 NG 178332-50	75%	Low sodium Good source: protein High source: fiber	Mid-mouthfeel High opacity Neutral pH stability	Coconut oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide
VitalBlend™ Coconut II 178326	75%	Low sodium Good source: protein High source: fiber	Lactose-free Digestive health + prebiotic fiber Suitable in neutral pH ranges Enhances mouthfeel	Coconut oil, inulin, sodium caseinate, sunflower lecithin, silicon dioxide
		S	unflower-Based	
Jerzee™ CWS 80-Bxs 175620	49%	Low sodium High source: vitamin E, calcium Good source: phosphorus	High solubility/cold water soluble Suitable in acidic–neutral pH ranges High oleic/unsaturated oil Enhances mouthfeel	Sunflower oil (with natural tocopherols), maltodextrin, modified food starch, mono- and diglycerides, tricalcium phosphate
Jerzee <sup>™</sup> CWS 80-Bx 175615	50%	Low sodium High source: vitamin E, calcium Good source: phosphorus	High solubility/cold water soluble High oleic/unsaturated oil Enhances mouthfeel	High oleic sunflower oil, maltodextrin, sodium caseinate, mono- and diglycerides, natural tocopherols, tricalcium phosphate
Jerzee" CWS 50-Sunflower NP IP 175636	50%	Low sodium High source: vitamin E, calcium, phosphorus	High solubility/cold water soluble Suitable in acidic–neutral pH ranges High oleic/unsaturated oil Enhances mouthfeel	Sunflower oil (with tocopherols), maltodextrin, modified food starch, mono- and diglycerides (with citric acid to preserve freshness), tricalcium phosphate
Jerzee <sup>™</sup> 50-Sunflower Cl3 175630	50%	Good source: phosphorus, potassium, vitamin E	Certified Kosher Dairy Low-density powder with good dispersion in cold/hot application	High oleic sunflower oil, maltodextrin, sodium caseinate, dipotassium phosphate, soy lecithin, silicon dioxide (flow agent), natural tocopherols
Jerzee <sup>™</sup> CWS 50-Sunflower IP3 175637	50%	Low sodium High source: vitamin E, calcium Good source: iodine, phosphorus	Enhances mouthfeel High oleic/unsaturated oil	Sunflower oil, maltodextrin, sodium caseinate, mono- and diglycerides (with citric acid to preserve freshness), tocopherols, tricalcium phosphate

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Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients		
		Sunflo	ower-Based continued			
Richmix® HO Sun 50-Nt NPH 18313-NPH		Low sodium High source: vitamin B2, protein, calcium, potassium, phosphorus	Good whitening	Sunflower oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, tricalcium phosphate, soy lecithin, tocopherols		
Richmix® Sun 50 NPH 19129-NPH	50%	Low sodium Good source: protein High source: potassium, calcium, phosphorus, vitamin E	Adds opacity and mouthfeel High oleic sunflower oil	Sunflower oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, contain 2% or less of each of the following: tricalcium phosphat soy lecithin, tocopherols (added to help protect flavor)		
Richmix® Sun 50 MD Base NPH 17922-NPH	50%	Good source: vitamin E, phosphorus Excellent source: potassium	Low-density	Sunflower oil, maltodextrin, sodium caseinate, mono- and diglycerides, dipotassium phosphate, soy lecithin, sodium aluminosilicate, tocopherols		
VitalBlend <sup>™</sup> Nutra Base NPH 19096-NPH-40	52%	Good source: potassium, vitamin B1, zinc Excellent source: protein, vitamins B2, B12, & E, phosphorus	Lactose-free Suitable in neutral pH ranges High opacity, mouthfeel	High oleic sunflower oil, sodium caseinate, mono- and diglycerides, dipotassium phosphate, silicon dioxide, soy lecithin, tocopherols		
VitalBlend <sup>™</sup> Sunflower IP 75% 178651-50		Low sodium Good source: protein High source: fiber Excellent source: vitamin E	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	High oleic sunflower oil, inulin, sodium caseinate, sunflower lecithin, silicon dioxide, mixed tocopherols		
Centennial" IX Sunflower 178623	75%	Low sodium High source: vitamin E	Sugar- and lactose-free Starch-based No Maillard browning, tolerates low pH applications	Sunflower oil, modified food starch, maltodextrin, sodiun aluminosilicate as anti-caking agent, natural tocopherol		
			MCT-Based			
VitalBlend <sup>™</sup> MCT NG 178703	73%	Good source: vitamin B12 Excellent source: protein, vitamin B2, phosphorus	Lactose-free High mouthfeel Suitable in neutral pH ranges High opacity, viscosity	Medium-chain triglycerides, sodium caseinate, silicon dioxide, sunflower lecithin		
Centennial" <b>75</b> MCT Cl 178715	75%	Low sodium High source: fiber	Sugar-free Medium-chain triglycerides with palm, palm kernel, and/or coconut-based fatty acids	Medium-chain triglycerides, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide (flow agent)		
			Olive-Based			
VitalBlend <sup>™</sup> Olive <b>7500</b> 178742-50	75%	Low sodium Good source: protein High source: fiber Excellent source: vitamin E	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	Extra virgin olive oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide, tocopherols		
			Safflower-Based			
Centennial" 73 Safflower Cl 178625	70%	Good source: protein, selenium High source: vitamins B2 & B12, calcium, phosphorus	High-fat product with high oleic safflower oil Adds opacity and mouthfeel Higher protein level for better emulsion stablity	Safflower oil with tocopherols, nonfat dry milk, disodium phosphate, silicon dioxide (flow agent), natural flavor		

### **Bakery & Desserts**

Balchem Product Name Target   SKU Fat		Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients
			Dairy-Based	
Quali Cream™ 7211 1017211-50	73%	Good source: protein, potassium, choline, vitamin E, panthenic acid Excellent source: vitamins A & B12, calcium, riboflavin, phosphorus	Enhances creaminess, mouthfeel, opacity	Cream, nonfat dry milk, dipotassium phosphate, silicon dioxide
			Palm-Based	
QuIC Creamer <sup>™</sup> 3813 172705-1200-EXP	39%	Low sodium Good source: potassium High phosphorus	Lactose-free Adds opacity, mouthfeel Pleasant dairy flavor	Corn syrup solids, palm oil, sodium caseinate, contains 2% or less of each of the following: dipotassium phosphate, sugar, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), silicon dioxide, natural and artificial flavors
QuIC Whip 5001 47 175386-MB		Low sodium Good source: protein	Sweet, smooth, light whip topping base Contributes to aeration, volume, structure and stability Enhances texture, mouthfeel	Hydrogenated vegetable oil (palm kernel and coconut), corn syrup solids, lactose, sugar, lactic acid ester of mono- and diglycerides, sodium caseinate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), contains 2% or less of each of the following: sodium aluminosilicate, dipotassium phosphate, natural and artificial flavors, soy lecithin, citric acid (to preserve freshness), annatto (color)
QuIC Whip 8010 NPH 1128010-50-NPH-MB	49%	Low sodium, Low cholesterol Good source: protein	Contributes to aeration, volume, structure, stability Enhances texture, mouthfeel	Hydrogenated palm kernel oil, corn syrup solids, lactose, sugar, lactic acid esters of mono- and diglycerides, sodium caseinate, mono- and diglycerides (with tocopherols, ascorbic acid, citric acid to preserve freshness), sodium aluminosilicate, dipotassium phosphate, artificial flavor
Jerzee <sup>™</sup> 50 Palm 175705	50%	Low sodium, Low cholesterol	Adds opacity and mouthfeel Lactose-free Less saturated fat than coconut oil	Palm oil, corn syrup solids, sodium caseinate, mono- and diglycerides, sodium aluminosilicate (flow agent), BHT added to help protect flavor
Richmix® 5027 175754-MB-50	50%	Good source: protein High source: potassium, phosphorus	Adds opacity, mouthfeel	Palm oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, contains 2% or less of each of the following: sodium aluminosilicate, soy lecithin
QuIC Whip 8006 NPH 1128006-50-NPH	55%	Good source: potassium, phosphorus	No sugar added Whipping powder Adds mouthfeel Helps with volume, texture, crumb structure	Hydrogenated palm kernel oil, maltodextrin, propylene glycol esters of fats and fatty acids, sodium caseinate, acetylated monoglycerides, contains 2% or less of each of the following: dipotassium phosphate, microcrystalline cellulose, hydroxypropyl methyl cellulose, carboxymethylcellulose sodium, mono- and diglycerides, sodium aluminosilicate
DMP NPH 176725	68%	Low sodium, Low cholesterol High source: protein	Contributes to aeration, volume, structure, stability in baked goods Enhances texture, mouthfeel	Palm kernel oil, sugar, corn syrup solids, sodium caseinate, propylene glycol mono esters, acetylated monoglycerides, mono- and diglycerides, sodium aluminosilicate (flow agent)
QuIC Creamer* 7351 1047351-50			Adds creaminess, opacity, mouthfeel Buffering capacity	Palm oil, corn syrup solids, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate
Centennial** 7307 178721	73%	Low sodium High source: phosphorus	Lower saturated fat than coconut oil Adds opacity, mouthfeel Lactose-free	Palm oil, corn syrup solids, sodium caseinate, contains 2% or less of each of the following: dipotassium phosphate, monoglycerides, sodium aluminosilicate (anti-caking agent)
Centennial™ 73-Palm NTHB 178710	74%	High source: potassium, phosphorus	Highly buffered Enhances mouthfeel, opacity	Palm oil, maltodextrin, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium hexametaphosphate, silicon dioxide
Centennial <sup>™</sup> 75 Palm NP 178705	75%	Low sodium	Suitable in acidic–neutral pH ranges Enhances mouthfeel, opacity	Palm oil, maltodextrin, modified food starch, sodium aluminosilicate (flow agent)

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Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients	
			Coconut-Based		
QuIC Creamer <sup>™</sup> 4803 1044803-50	48%	Low cholesterol Good source: protein, potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, dipotassium phosphate, sugar, mono- and diglycerides, sodium aluminosilicate, tetrasodium pyrophosphate, soy lecithin	
Jerzee™ CWS - 80Bx Sc 199663	49%	Low sodium High source: calcium, phosphorus	Suitable in acidic–neutral pH ranges Enhances mouthfeel	Coconut oil, maltodextrin, modified food starch, contains 2% or less of the following: mono- and diglycerides, tricalcium phosphate (flow agent)	
QuIC Creamer <sup>™</sup> 5000 1045000-50	49%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, dipotassium phosphate, mono- and diglycerides, silicon dioxide	
QuIC Creamer <sup>™</sup> 5004 1045004-50	49%	Low cholesterol	Adds creaminess, opacity, mouthfeel	Coconut oil, corn syrup solids, sodium caseinate, sodium citrate, mono- and diglycerides, salt, sodium aluminosilicate	
Jerzee <sup>™</sup> Blend 22007-Coconut A 175345	50%	Low sodium Good source: potassium High source: phosphorus	Enhances mouthfeel Buffering capacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, sodium aluminosilicate	
Jerzee <sup></sup> Blend C 175300	50% Good source: potassium High source: phosphorus		Enhances mouthfeel Buffering capacity Adds slight sweet and dairy notes	Coconut oil, corn syrup solids, potassium caseinate, sugar, dipotassium phosphate, mono- and diglycerides, salt, sodium stearoyl lactylate, carrageenan, sodium aluminosilicate, artificial flavor, annatto and turmeric extracts (for color)	
Jerzee <sup>™</sup> Blend Ndb 175305	50%	Low sodium, Low cholesterol Good source: phosphorus, potassium	Versatile powder that can be used in hot and cold applications	Coconut oil, corn syrup solids, sodium caseinate, sugar, dipotassium phosphate, propylene glycol esters of fatty acids, mono- and diglycerides, sodium aluminosilicate, salt, soy lecithin, calcium carrageenan, artificial flavor and color	
Richmix® B1 MD SI NPH 50 18871-NPH		Good source: phosphorus, calcium, iron, potassium	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Coconut oil, maltodextrin, sodium caseinate, dipotassium phosphate, mono- and diglycerides (with citric acid to preserve freshness), silicon dioxide, soy lecithin	
Richmix® B-1 NPH 5100-NPH	50%	Low sodium Excellent source: potassium, phosphorus	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Hydrogenated coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, dipotassium phosphate, sodium aluminosilicate, soy lecithin	
VitalBlend** Oat 5001 NG 175772-50		High in fiber Good source: potassium, iron Excellent source: protein, folate, magnesium, phosphorus, zinc	Lactose-free Suitable in acidic–neutral pH ranges Enhances mouthfeel	Coconut oil, chickpea protein concentrate, tapioca maltodextrin, cocoa butter, oat bran, soluble tapioca fiber, silicon dioxide, salt, natural flavor	
VitalBlend™ Organic Pea XI 175394-40	50%	Excellent source: protein, calcium, phosphorus, copper, zinc, iron	Organic Suitable in neutral pH Enhances viscosity, texture, mouthfeel	Organic coconut oil, organic rice syrup solids, organic pea protein, sodium citrate, tricalcium phosphate, organic sunflower lecithin	
Richmix® A NPH 5098-NPH	52%	Good source: phosphorus High source: vitamins B2 & B12, potassium,	Low cholesterol Good whitening, mouthfeel Clean dairy taste	Hydrogenated coconut oil, corn syrup solids, sodium caseinate, sugar, dipotassium phosphate, propylene glycol esters of fatty acids, mono- and diglycerides, sodium aluminosilicate, salt, soy lecithin, carrageenan, natural and artificial flavors, annatto (for color)	
QuIC Creamer <sup>™</sup> 7170 1047170-50	71%	Low sodium, Low cholesterol	Adds creaminess	Coconut oil, maltodextrin, modified food starch, mono- and diglycerides, silicon dioxide, hydrogenated palm oil	
Centennial™ II Coconut 178310	73%	Low sodium	Enhances mouthfeel, opacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, sodium aluminosilicate	
Centennial™ 73 Coconut IP2 730 178316-40		Low sodium, Low cholesterol Good source: phosphorus	Versatile high-fat powder	Coconut oil, maltodextrin, sodium caseinate, mono- and diglycerides, dipotassium phosphate, silicon dioxide (anticaking agent)	
Centennial™ I Coconut 178301	74%	Low sodium Good source: potassium, protein High source: phosphorus	Enhances mouthfeel, opacity Buffering capacity	Coconut oil, lactose, sodium caseinate, dipotassium phosphate, silicon dioxide	



### **Bakery & Desserts** continued

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients
		Coco	nut-Based continued	
Centennial <sup>™</sup> <b>75</b> Coconut CL2 178325	75%	Low sodium Good source: protein High source: fiber	Enhances mouthfeel, opacity	Coconut oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide
VitalBlend" Coconut II 178326	75%	Low sodium Good source: protein High source: fiber	Lactose-free Digestive health + prebiotic fiber Suitable in neutral pH ranges Enhances mouthfeel	Coconut oil, inulin, sodium caseinate, sunflower lecithin, silicon dioxide
Centennial <b>™ 7506</b> 175764-50	75%	Low sodium Good source: protein High source: fiber	Sugar-free Adds opacity, mouthfeel	Coconut oil, avocado oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide, mixed tocopherols, rosemary extract, sunflower oil
Centennial™ 7505 178333	75%	Low sodium Good source: fiber, potassium, vitamin B2, calcium Excellent source: protein, vitamin B12, phosphorus	Clean label Dairy-based protein Primarily saturated fat source Enhances texture Inhibits moisture migration	Coconut oil, whey protein concentrate, soluble corn fiber, contains 2% or less of each of the following: dipotassium phosphate
Centennial <sup>™</sup> 7508 NG 178332-50	75%	Low sodium Good source: protein High source: fiber	Mid-mouthfeel High opacity Neutral pH stability	Coconut oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide
		S	unflower-Based	
Jerzee" CWS 80-Bxs 175620	49%	Low sodium Good source: phosphorus High source: vitamin E, calcium	High solubility/cold water soluble Suitable in acidic–neutral pH ranges High oleic/unsaturated oil Enhances mouthfeel	Sunflower oil (with natural tocopherols), maltodextrin, modified food starch, mono- and diglycerides, tricalcium phosphate
Jerzee™ CWS 50-Sunflower IP3 175637	50%	Low sodium Good source: iodine, phosphorus High source: vitamin E, calcium	Enhances mouthfeel High oleic/unsaturated oil	Sunflower oil, maltodextrin, sodium caseinate, mono- and diglycerides (with citric acid to preserve freshness), tocopherols, tricalcium phosphate
Jerzee" CWS 50-Sunflower NP IP 175636	50%	Low sodium Good source: iodine High source: vitamin E, calcium, phosphorus	High solubility/cold water soluble Suitable in acidic–neutral pH ranges High oleic/unsaturated oil Enhances mouthfeel	Sunflower oil (with tocopherols), maltodextrin, modified food starch, mono- and diglycerides (with citric acid to preserve freshness), tricalcium phosphate
VitalBlend* Sunflower IP 178651-50			Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	High oleic sunflower oil, inulin, sodium caseinate, sunflower lecithin, silicon dioxide, mixed tocopherols
			MCT-Based	
VitalBlend™ MCT 5000 175758-50	51%	Low sodium Good source: vitamin B2, calcium Excellent source: potassium	Suitable in neutral pH ranges Dairy-based protein with lactose Enhances mouthfeel	Medium-chain triglycerides, tapioca maltodextrin, nonfat dry milk, potassium citrate, silicon dioxide (flow agent)
VitalBlend" MCT NG 178703	73%	Good source: vitamin B12 Excellent source: protein, vitamin B2, phosphorus	Lactose-free High mouthfeel Suitable in neutral pH ranges High opacity, viscosity	Medium-chain triglycerides, sodium caseinate, silicon dioxide, sunflower lecithin
			Olive-Based	
VitalBlend* Olive 7500 178742-50	75%	Low sodium High source: fiber Good source: protein Excellent source: vitamin E	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	Extra virgin olive oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide, tocopherols

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### **Snacks & Cereal**

Balchem Product Name SKU	Target Fat	Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients		
			Palm-Based			
Jerzee <sup>™</sup> 31-Palm NT 170706-MB	31%	Low sodium Good source: potassium High source: vitamin B2, phosphorus	Enhances mouthfeel Adds slight sweet and dairy notes Buffering capacity	Corn syrup solids, palm oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate, artificial flavor, riboflavin (for color)		
QuIC Creamer <sup>™</sup> 7351 1047351-50	72%	Low sodium, Low cholesterol Excellent source: phosphorus, potassium	Adds creaminess, opacity, mouthfeel Buffering capacity	Palm oil, corn syrup solids, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate		
Centennial <sup>™</sup> <b>7307</b> 178721	73%	Low sodium High source: phosphorus	Lower saturated fat than coconut oil Adds opacity and mouthfeel Lactose-free  Lactose-free  Lower saturated fat than coconut oil Palm oil, corn syrup solids, sodium casein 2% or less of each of the following: dipota phosphate, monoglycerides, sodium alum (anti-caking agent)			
Centennial <sup>™</sup> 73-Palm NTHB 178710	74%	High source: potassium, phosphorus	Highly buffered Enhances mouthfeel, opacity	Palm oil, maltodextrin, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium hexametaphosphate, silicon dioxide		
Centennial <sup>™</sup> 75 Palm NP 178705	75%	Low sodium	Suitable in acidic–neutral pH ranges Enhances mouthfeel, opacity	Palm oil, maltodextrin, modified food starch, sodium aluminosilicate (flow agent)		
			Coconut-Based			
VitalBlend* Oat 1703NG 169381-50	17%	Good source: potassium High source: fiber Excellent source: protein, zinc, calcium, vitamins A & D, folate, phosphorus, magnesium, iron	Low opacity Suitable in acidic or neutral pH applications Enhances mouthfeel	Tapioca maltodextrin, chickpea protein concentrate, coconut oil, soluble tapioca fiber, oat bran, calcium carbonate, salt, natural flavor, silicon dioxide, vitamin A palmitate, vitamin D3		
QuIC Creamer** 3004 1043004-50	35%	Low sodium, Low cholesterol Good source: potassium Excellent source: phosphorus	Adds creaminess, opacity, mouthfeel Buffering capacity	Corn syrup solids, coconut oil, sodium caseinate, dipotassium phosphate, mono- and diglycerides, sodium aluminosilicate		
QuIC Creamer <sup>™</sup> 7170 1047170-50	71%	Low sodium, Low cholesterol	Adds creaminess	Coconut oil, maltodextrin, modified food starch, mono- and diglycerides, silicon dioxide, hydrogenated palm oil		
Centennial™ II Coconut 178310	73%	Low sodium	Enhances mouthfeel, opacity	Coconut oil, corn syrup solids, sodium caseinate, mono- and diglycerides, sodium aluminosilicate		
Centennial™ 73 Coconut IP2 178316-40	73%	Low sodium, Low cholesterol Good source: phosphorus	Versatile high-fat powder	Coconut oil, maltodextrin, sodium caseinate, mono- and diglycerides, dipotassium phosphate, silicon dioxide (anticaking agent)		
Centennial™ I Coconut 178301	74%	Low sodium Good source: potassium, protein High source: phosphorus	Enhances mouthfeel, opacity Buffering capacity	Coconut oil, lactose, sodium caseinate, dipotassium phosphate, silicon dioxide		
Centennial <sup>™</sup> 75 Coconut CL2 178325	75%	Low sodium Good source: protein High source: fiber	Enhances mouthfeel, opacity	Coconut oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide		
Centennial" <b>7506</b> 175764-50	75%	Low sodium Good source: protein High source: fiber	Sugar-free Adds opacity, mouthfeel	Coconut oil, avocado oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide, mixed tocopherols, rosemary extract, sunflower oil		
Centennial" 7505 178333	75%	Low sodium, Good source: fiber, potassium, vitamin B2, calcium Excellent source: protein, vitamin B12, phosphorus	Clean label Dairy-based protein Primarily saturated fat source Enhances texture Inhibits moisture migration	Coconut oil, whey protein concentrate, soluble corn fiber, contains 2% or less of each of the following: dipotassium phosphate		
Centennial™ 7508 NG 178332-50	08 NG 75% Low sodium Good source: protein High source: fiber		Mid-mouthfeel High opacity Neutral pH stability	Coconut oil, soluble tapioca fiber, sodium caseinate, contains 2% or less of each of the following: sunflower lecithin, silicon dioxide		



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### **Snacks & Cereal** continued

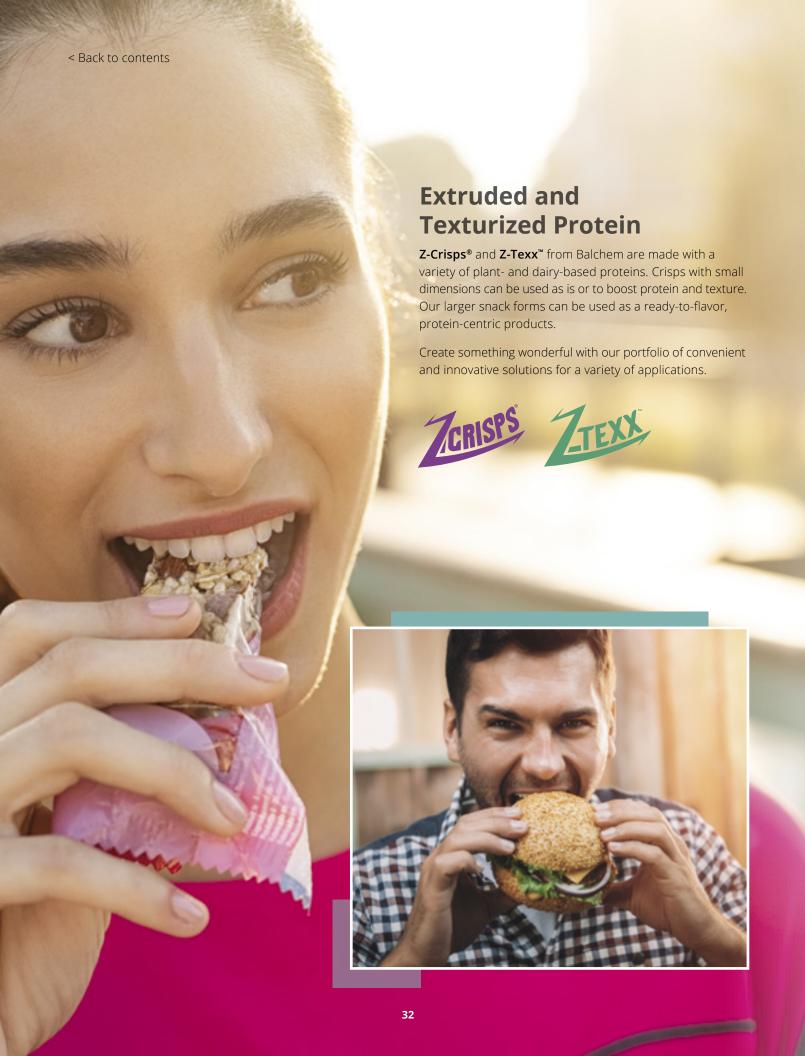
Balchem Product Name Targe SKU Fat		Nutritional Highlights (per 100g)	Features & Benefits	Key Ingredients	
		S	unflower-Based		
VitalBlend* Sunflower IP 178651-50	75%	Low sodium High source: fiber Good source: protein Excellent source: vitamin E	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	High oleic sunflower oil, inulin, sodium caseinate, sunflower lecithin, silicon dioxide, mixed tocopherols	
Centennial" IX Sunflower 178623	75%	Low sodium High source: vitamin E	Starch-based Sugar- and lactose-free No maillard browning Tolerates low pH applications	Sunflower oil, modified food starch, maltodextrin, sodium aluminosilicate as anti-caking agent, natural tocopherols	
			MCT-Based		
VitalBlend <sup>™</sup> MCT NG XII 178726-50	72%	Low sodium Good source: protein High source: fiber	Lactose-free Stable in neutral pH applications Enhances mouthfeel	Medium-chain triglycerides, inulin, sodium caseinate, silicon dioxide, sunflower lecithin	
VitalBlend™ MCT NG 178703	73%	Good source: vitamin B12 Excellent source: protein, vitamin B2, phosphorus	Lactose-free High mouthfeel Suitable in neutral pH ranges High opacity, viscosity	Medium-chain triglycerides, sodium caseinate, silicon dioxide, sunflower lecithin	
VitalBlend" MCT 7510 NG 178734-50	75%	Low sodium Good source: protein High source: fiber Excellent source: choline	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	Medium-chain triglycerides, soluble tapioca fiber, sodium caseinate, choline chloride, silicon dioxide, sunflower lecithin	
VitalBlend <sup>™</sup> MCT 7506 178731-50	75%	Good source: phosphorus High source: protein, vitamins B2 & B12	Sugar-free 95% C:8 MCT oil Adds opacity and mouthfeel	Medium-chain triglycerides, sodium caseinate	
Centennial™ 75 MCT CI 178715	75%	Low sodium High source: fiber	Sugar-free Medium-chain triglycerides with palm, palm kernel, and/or coconut-based fatty acids	Medium-chain triglycerides, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide (flow agent)	
			Olive-Based		
VitalBlend™ Olive 7500 178742-50	75%	Low sodium Good source: protein High source: fiber Excellent source: vitamin E	Lactose-free Suitable in neutral pH ranges Enhances mouthfeel	Extra virgin olive oil, soluble corn fiber, sodium caseinate, sunflower lecithin, silicon dioxide, tocopherols	
		S	afflower-Based		
Centennial <sup>™</sup> <b>73 Safflower Cl</b> 178625	73 Safflower CI 70% Good source: protein, selenium High source: vitamins B2 & B12 calcium, phosphorus		High-fat product with high oleic safflower oil Adds opacity, mouthfeel Higher protein level for better emulsion stablity	Safflower oil with tocopherols, nonfat dry milk, disodium phosphate, silicon dioxide (flow agent), natural flavor	

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### **Texturants & Excipients**

Balchem Product Name		Features & Benefits	Key Ingredients
Insta-Thick® Xanthan 5010009EA	1	A unique form of xanthan gum specially processed to provide an instant dispersion, dissolution, and very rapid generation of viscosity.	Xanthan gum
Insta-Thick® CMC (9M) 5010137EA		A medium-viscosity cellulose gum specially processed to provide instant dispersion and/or dissolution.	Sodium carboxymethyl cellulose
Insta-Thick® Guar 5010138EA	1	A unique form of guar gum specially processed to provide rapid dispersion, dissolution, and very rapid generation of viscosity.	Guar gum
Insta*Rice Trin 5010139EA	1	A unique form of rice maltodextrin specially processed to provide instant dispersion and dissolution. May also be used as a carrier for high-intensity sweeteners.	Rice maltodextrin
Insta-Thick® C-15L 5010145EA	1	A unique combination of milk reactive lambda carrageenan gum and 18 DE corn maltodextrin specially processed to provide instant dispersion, dissolution, and very rapid generation of viscosity.	Maltodextrin, carrageenan, dextrin
Insta-Thick® G2X-10 5010146EA		A unique thickening agent, specially processed to provide instant dispersion, dissolution, and a very rapid generation of viscosity.	Corn maltodextrin, guar gum, xanthan gum
Insta-Thick® X-10 Non-GMO 5010148EA	1	A unique thickening agent, specially processed to provide instant dispersion, dissolution, and a very rapid generation of viscosity.	Maltodextrin, xanthan gum
Vis*Quick® 11 5010149EA	1	A co-agglomeration of xanthan gum and guar gum that takes advantage of synergistic viscosity development to mimic xanthan.	Xanthan gum, guar gum
Vis*Quick® 21 5010150EA	1	A co-agglomeration of guar gum and xanthan gum that takes advantage of synergistic viscosity development to mimic xanthan gum.	Guar gum, xanthan gum
Insta*Starch® 10-70 SH 5010237EA	1	A unique form of pre-gelled modified tapioca starch and 10 DE corn maltodextrin, specifically processed for rapid generation of viscosity.	Modified tapioca starch, maltodextrin, palm oil, mono- and diglycerides, propylene glycol, citric acid, green tea and rosemary extract
Insta*Potato® Low Aw 5010201EA	1	A creamy, soluble, potato maltodextrin for rapid dispersion and increased viscosity. It may also be used as an excipient in sports nutrition or dietary supplement products or as a carrier for high-intensity sweeteners.	Potato maltodextrin
Insta*Rice Trin LWA - S 5010461EA	1	A unique form of rice maltodextrin specially processed to provide instant dispersion. May be used where low-water activity nature is desired.	Rice maltodextrin
Insta Inulin LWA 5010486EA	1	A low-water activity powdered food ingredient based on chicory inulin with a high level of oligofructose and may be used where low-water activity nature is desired.	Chicory root fiber
Insta Isomalt LWA 5010496EA	1	A low-water activity powdered food ingredient mixture of hydrogenated saccharides and may be used where low-water activity is desired.	Isomalt





	SKU	Description		Target Protein	Ingredients	Approx. Size
				NEW!	Hemp + Pea Protein	
Crisps	1380A	Z-Crisps® 60% Pea & Hemp Protein Crisps	1	60%	Pea protein, hemp protein concentrate, tapioca starch, brown rice flour, calcium carbonate	3–5mm
				NEW! T	exturized Pea Protein	
Shreds	9005C	Z-Texx <sup>™</sup> <b>Organic</b> Texturized Pea	1	70%	Organic pea protein, organic pea starch	Varies
					Pea Protein	
Snack	80379WP	Z-Crisps® Wavy Pea Chip Base	1	41%	Pea protein isolate, dehydrated potato, potato starch, calcium carbonate, salt	25x25mm
Snack	80270WP	Z-Crisps® Pea Protein Chip Base	1	56%	Pea protein isolate, dehydrated potato, potato starch, salt, calcium carbonate	28x38mm
Crisps	80774F	Z-Crisps® Pea Protein Disks	1	60%	Pea protein, tapioca starch	1-2mm
Crisps	80787F	Z-Crisps <sup>®</sup> 60% Protein Cocoa Pea Crisps	1	60%	Pea protein isolate, tapioca starch, cocoa powder, rice flour, calcium carbonate	3-4mm
Crisps	80402F	Z-Crisps® 60% Protein Pea Crisps	1	60%	Pea protein isolate, pea starch, rice flour, calcium carbonate	3-4mm
Crisps	80652F	Z-Crisps® 60% Protein Pea Crisps with Tapioca	1	60%	Pea protein isolate, tapioca starch, rice flour, calcium carbonate	3-4mm
Crisps	80512F	Z-Crisps® <b>Organic</b> 60% Protein Pea Crisps	1	60%	Organic pea protein, organic rice starch	3-5mm
Crisps	80765F	Z-Crisps® 60% Protein Pea-Brown Rice Crisps (Complete Protein)	1	60%	Pea protein/brown rice protein, tapioca starch, calcium carbonate	3–6mm
Crisps	80886F	Z-Crisps® 60% Pea Protein	1	60%	Pea protein, rice starch	3-6mm
Crisps	80819F	Z-Crisps® 70% Pea Protein	1	70%	Pea protein, tapioca starch, calcium carbonate	3–4mm
					Soy Protein	
Snack	80220F	Z-Crisps® Zippers	1	45%	Soy protein isolate, dehydrated potato, potato starch, soy flour, calcium carbonate	6x10mm
Snack	80252WP	Z-Crisps® Cocoa O's Shape	1	60%	Soy protein isolate, soy flour, soy protein concentrate, rice flour, cocoa powder	5x6mm
Snack	80056WP	Z-Crisps® O's Shape	1	60%	Soy protein isolate, soy flour, soy protein concentrate, rice flour	10x14mm
					Whey Protein	
Snack	80461WP	Z-Crisps® Gluten-Free Whey Thins		45%	Whey protein concentrate, brown rice flour, calcium carbonate	25x25mm
Crisps	80752F	Z-Crisps® 60% Protein Whey Crisps (Non-GMO Project Verified)		60%	Whey protein concentrate, rice flour, tapioca starch, calcium carbonate, organic sunflower lecithin	4–5mm
Crisps	80481F	Z-Crisps® 60% Whey Crisp		60%	Whey protein isolate, whey protein concentrate, rice flour, tapioca starch, calcium carbonate, sunflower lecithin	4–5mm
Crisps	80503F	Z-Crisps® 70% Protein Whey Mini Crisps		70%	Whey protein isolate, whey protein concentrate, tapioca starch, calcium carbonate, sunflower lecithin	2-4mm
Crisps	80874F	Z-Crisps® 70% Protein Mini Cocoa Whey Crisps		70%	Whey protein isolate, whey protein concentrate, tapioca starch, cocoa powder, calcium carbonate, sunflower lecithin	2-4mm
Crisps	80138F	Z-Crisps® 70% Protein Whey Crisps with Tapioca Starch	1	70%	Whey protein isolate, whey protein concentrate, tapioca starch, calcium carbonate, soy lecithin	4–5mm
Crisps	80241F	Z-Crisps® 70% Whey Protein Crisps		70%	Whey protein isolate, whey protein concentrate, tapioca starch, calcium carbonate, sunflower lecithin	4–5mm
Crisps	80450F	Z-Crisps® 70% Whey Protein Cocoa Crisps		70%	Whey protein isolate, whey protein concentrate, tapioca starch, cocoa powder, calcium carbonate, sunflower lecithin	4–5mm
Crisps	80846F	Z-Crisps® 70% Whey Protein Disks		70%	Whey protein isolate, whey protein concentrate, tapioca starch, calcium carbonate, sunflower lecithin	4-5mm
Crisps	80847F	Z-Crisps® 70% Protein Cocoa Whey Disks		70%	Whey protein isolate, whey protein concentrate, tapioca starch, cocoa powder, calcium carbonate, sunflower lecithin	4-6mm
Crisps	80608F	Z-Crisps® 80% Whey Protein Crisps		80%	Whey protein isolate, tapioca starch, calcium carbonate, sunflower lecithin	4-6mm

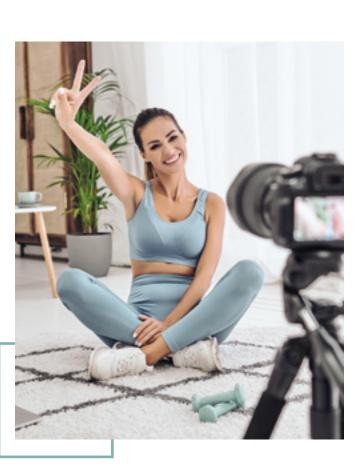
## **Encapsulated Ingredients & Enabling Technologies**

	Preservatives	Acidulants	Salt	Chemical Leavening	Sugar	Choline Chloride
Clean Label						
Reduced Sodium						
Mold Inhibition in Baked Goods						
pH Control/Shelf Life Extension in Baked Goods						
Prolonged Frozen Shelf Life of Baked Goods						
Prolonged Shelf Life of Sanded Candies						
Sourdough Flavor						
Longer-Lasting Flavor in Chewing Gum						
Starter Culture Replacement in Meat Products						
pH Reduction in Meat Products						
Improved Texture of Meat Products						
Eliminated or Reduced Syneresis in Meat Products						
Freeze Point Suppression						

#### **MeatShure®**

Salt (sodium chloride) is commonly used as a functional ingredient in processed meats, as a flavoring in seasonings, and as a means of preservation. MeatShure® encapsulated salt helps control bind and syneresis, reduces protein extraction, and delays the onset of oxidative rancidity during shelf life. The use of MeatShure encapsulates helps to optimize high-speed forming operations by preventing salt-soluble proteins from accumulating on equipment. This reduces patty adhesion and malformation, and reduces cleaning delays, all while increasing process yield. From a sensory aspect, it improves mouthfeel and allows the meat to be less chewy and elastic.

**PRODUCTS:** Sodium Chloride



### MeatShure® Acidulants / pH Reducers

MeatShure® encapsulated acidulants are used to control pH, develop acidic flavor profiles and increase process efficiency in ready-to-eat meats. MeatShure acids can be used as an alternative to traditional fermentation methods, allowing the acid to be directly mixed into the meat emulsion without negatively impacting the meat proteins or breaking the emulsion itself. The encapsulated acidulants are subsequently released from the coating by the combined effects of heat and moisture, lowering pH and delivering desired flavor profiles.

### PRODUCTS:

- Citric Acid
- Lactic Acid
- Malic Acid
- Glucono-delta-lactone
- Sodium Diacetate Acid
- Vinegar Type Powder

### **MeatShure® Meat Restructuring**

MeatShure restructuring technology enables controlled gelation binding in restructured meat products and maximizes the value of meat trimmings. Our encapsulated calcium lactate works in conjunction with alginates to provide freeze/thaw stable meat binding.

**PRODUCTS:** Calcium Lactate

### **ConfecShure®**

Balchem specializes in the development and delivery of encapsulated solutions to top confectionery manufacturers. We provide a unique blend of technical expertise and problem-solving support, enabling you to achieve your goals. ConfecShure® encapsulated ingredients let you control the release of acid using our proprietary microencapsulation technology. We protect ingredients from degradation and pre-reaction, strategically delivering them for optimum performance.

#### **PRODUCTS:**

- Citric Acid
- Lactic Acid
- Malic Acid
- Tartaric Acid



### **BakeShure®**

**BakeShure®** microencapsulated leavening agents provide full control of the reaction between sodium bicarbonate and the acidic components within dough and batter, improving baked product yield and appearance. Microencapsulation prolongs the shelf life of frozen, fresh and refrigerated bakery products.

#### PRODUCTS:

- Monocalcium Phosphate
- Sodium Bicarbonate
- Sodium Aluminium Phosphate



### BakeShure® Clean

**BakeShure®** Clean is our clean label category of baking powders and shelf life extenders. It is suitable for bakery product applications including fresh, frozen and refrigerated. The **BakeShure Clean** line of products are not formulated with aluminum-containing raw materials, have reduced sodium content, and won't necessitate USDA BE labeling.

#### PRODUCTS:

- BakeShure® Complete
- BakeShure® Complete Advantage
- BakeShure® Free

#### **BakeShure® Sours / Acidulants**

BakeShure® Sours make it possible to produce authentic specialty sourdough bread by delivering superior sourdough flavor. Using our 'drop-in' technology, Balchem's proprietary microencapsulation technology allows manufacturers to easily create new sourdough formulas without the need of fermentation resulting in reduced production time. Since BakeShure Sours do not release until the final stages of baking, formulators using this technology see improved color, greater loaf volume and better finished product appearance, all while simplifying the production process.

#### PRODUCTS:

- Sourdough Blend
- Citric Acid
- Fumaric Acid
- Malic Acid
- Lactic Acid



### BakeShure® Preservation & Shelf Life

Microencapsulation is an effective way to maximize the quality and mold-free shelf life of bakery products.

Balchem's proprietary controlled-release technology minimizes the unwanted side effects of highly reactive food acids and preservatives during the baking process. With BakeShure® Preservation technology, you can prevent protein degradation, improve yeast activity, boost product consistency, optimize production and launch new products you previously thought impossible, while achieving the desired shelf life.

#### PRODUCTS:

- Sorbic Acid
- Calcium Propionate
- Citric Acid
- Malic Acid
- Fumaric Acid

#### C-Salt

Choline chloride has been known for decades as an effective, Generally Recognized as Safe (GRAS) salt substitute. However, its characteristic hygroscopicity has ruled it out as a truly viable solution for reduced-sodium food product development – until now. Moisture uptake and clumping are problems of the past with Balchem **C-Salt**, a choline chloride-based salt replacer with significantly improved flow characteristics. This new functionality of choline chloride makes it usable in blends of dry bakery ingredients and savory seasonings.

#### PRODUCTS:

C-Salt – Choline Chloride

### Flavor, Color & Texture

#### **Balchem's INhance™ Inclusions**

Balchem is a market leader in the manufacture of lipid-based inclusions. **INhance**<sup>™</sup> Inclusions are functional ingredients that help protect and deliver flavor, aroma, color and texture to a variety of end-use applications. These fat-based inclusions are designed to be easily incorporated into food products and only release their functional components once the melt point of the fat is achieved. These are a convenient and cost-effective method for delivering new flavors, aromas and colors. This is especially important in creating limited-time offerings, limited editions, and carrying forth a flavor or theme to your product.

### INhance<sup>™</sup> Inclusions GLIMMER<sup>™</sup> **INhance**<sup>™</sup> **Inclusions GOOEY**

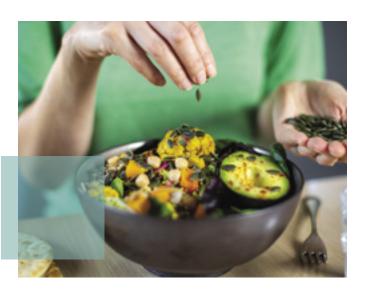
Our newest addition, *GLIMMER*™ inclusions add ribbons of glittery, shimmery color and flavor in your baked goods. These unique inclusions are even better than using edible glitter – they are easier to see, stay within their ribbon of color, are bolder and more impactful. Customizable for color, flavor and some ingredient labeling. GOOEY is our line of inclusions that allow you to create a gooey, stringy appearance and mouthfeel (think marshmallow).

### INhance<sup>™</sup> Inclusions *HARVEST* Fruit, Vegetable & Spice Inclusions

Working with real spices, fruits and vegetables in baked goods and other food products has its challenges: frozen storage and handling, inconsistent supply, price volatility, and natural variations in flavor, color and quality. Balchem inclusions offer a convenient way to add a burst of spice, fruit flavor, or vegetable flavor to a variety of baked goods without the challenges of working with real fruits and vegetables. They deliver enhanced flavor and aroma, offer easy handling and incorporation into batters and mixes, add authentic visual cues and visual impacts, require no refrigerated storage. They are available using natural flavors, non-certified colors and other customizations to meet your unique requirements.

### INhance<sup>™</sup> Inclusions SAVORY & INhance<sup>™</sup> Inclusions *PLANTED* Meat, Dairy & Plant-Based Inclusions

Deliver delicious meat and dairy flavors to your baked goods and create unique flavor combinations. With our plant-based inclusions, you can offer the taste of real cheese and real meat to consumers who want the taste but prefer non-animal sources, even occasionally.



### INhance<sup>™</sup> Inclusions INDULGENT

Our **INDULGENT** line brings comfort and warmth to bakery products. These inclusions deliver enhanced flavor and aroma. Think warm flavors like cinnamon, maple, and vanilla to bring out the indulgence you have come to enjoy.

### INhance<sup>™</sup> Inclusions *FREE*

Clean labeling influences food service and retailers. Retail leaders are meeting consumer expectations by eliminating select ingredients. Our **FREE** line offers an array of "free from" products - free from sugar, nut allergens and soy.



## **Flavor & Sensory Systems**

We provide customized ingredient systems that help you bring innovative products to market faster. Our systems provide ease of use for you, so your customers get a consistent product every time it goes out the door.

- KALVA® Dip Coatings
- INhance<sup>™</sup> Variegates
- INhance<sup>™</sup> Textured Variegates
- INhance<sup>™</sup> Low-Melt Inclusions
- INjoy™ Flavor Systems
- Chocolate Dairy Powders
- Milk Flavor Bases
- Eggnog Flavor Bases
- Smoothie Bases
- Shake Bases
- Juice Bases - Flavored Teas
- Ice Cream Flavor Bases
- Frozen Dessert Flavor Bases
- Functional Beverage Bases & Flavor Systems



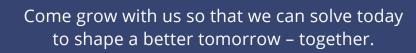




We thank you for taking time and allowing us to share who we are and what we value. We hope we have inspired you to think differently about Balchem. Engage with us in support of your growth.



To get started, scan the QR code or visit: **balchem.com/human-nutrition-health** 



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