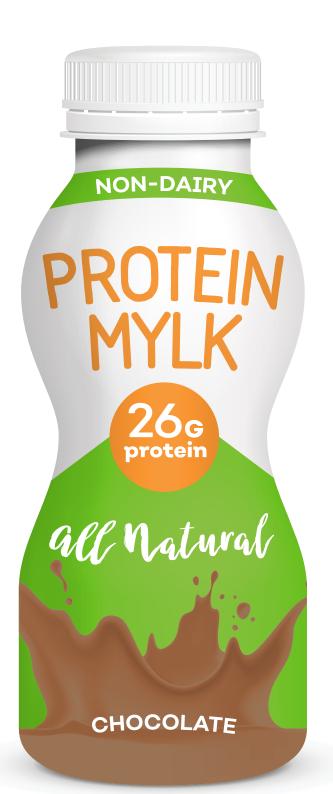
# BEVERAGE SOLUTIONS



# Plant-Based Ingredients for Beverage Applications

Harnessing allergen-friendly, high-protein benefits.

Overcoming formulation challenges.









## Plant Powered Proteins • Sweeteners • Dairy Alternatives

Axiom Foods, known as the world's largest and most innovative manufacturer and distributor of organic, patented, chemical-free, hexane-free and allergenfriendly Oryzatein® Brown Rice Protein since 2005, is now capable of meeting your beverage application needs with our versatile product lines. These not only include the Oryzatein® Rice Protein, but also VegOtein P™ Organic Pea Protein, Incatein™ Sacha Inchi Protein and now Cannatein® Organic Hemp Hearts Protein, plus whole grain dairy milk-substitutes for most any beverage requirement.

### Axiom Foods Ingredients for Beverage Functionality

Axiom Foods' plant-based proteins work best in Low Acid environments and with gums to aid in solubility. High Acid formulations work best when using low amounts of plant-based proteins as they have been shown to denature in high acid and heat environments.



VEG-Q-TEIN™ INCATEIN™

ORYZ-O-LAIT™

AVENOLAIT°

ORYZA™

YOUR BRAND HERE

Product	Low Acid pH 7.0 heated to >240F Refrigerated and Aseptic	High Acid pH <3.5 heated to >180F		
Plant Proteins				
Oryzatein (Rice)	Very Good	Good		
Oryzatein Silk	Very Good	Good		
Oryzatein Ultra	Very Good	Very Good		
Oryzatein SG-BN	Best	Best		
Vegotein P80 (Pea)	Best	Good		
Vegotein MA	Best	Best		
Incatein (Sacha Inchi)	TBD	TBD		
Dairy Alternatives				
OryzOlait (Rice)	Best	Good		
AvenOlait (Oat)	Best	Best		
Sweetener				
Oryza (Rice)	Best	Best		



### Axiom Foods RiceMilk Beverage Examples Aseptic Processing Formulas

We understand the challenges our customers are facing and are here in L.A. since 2005 to help find solutions. What follows is an example, generic starting formula. From here 5–10 grams per serving of our rice protein can be added to achieve a nice tasting, protein-rich, nutrient-dense milk alternative.

Axiom Foods RiceMilk Beverages				
All Flavors				
Equipment Cleaned/Sanitized	$\sqrt{}$			
pН	6.58			
Brix	Not tested			
Flavor	Approved			
Target Lethality (F <sub>o</sub> )	5			
Microthermics Check				
Flowrate (Target 1.5 L/min)	1.5 L/m			
Preheater Temp	200°F			
Final Heater Temp	284°F			
Hold Time at Target Temp	10 sec.			
Temp at End of Hold Tube (EH1)	277–280.5°F			
Cooler 1 (Target 140–160°F)	158°F			
Homogenizer Pressure (psi)	2000+500			
Cooler 2	93.2°F			
Product Exit Temp	87.8°F			
Number of Containers Produced	18/16 oz			
Storage Location	Refrigerator (40°F)			

RiceMilk Beverage — Original		
Water	90.129%	
OryzOlait <sup>TM</sup>	9.000%	
Canola Oil	0.500%	
Vitamin Premix	0.240%	
Carrageenan	0.015%	
Salt	0.100%	
Vanilla 3X	0.016%	

RiceMilk Beverage — Chocolate		
Water	84.925%	
OryzOlait <sup>TM</sup>	9.000%	
Sugar	4.000%	
Canola Oil	0.500%	
Nat Chocolate Flavor	0.200%	
Cocoa Powder	0.850%	
Vitamin Premix	0.240%	
Vanilla 3X	0.090%	
Carrageenan	0.015%	
Salt	0.180%	

### Also Checkout an OatMilk Beverage Starter Formulation

OatMilk Beverage — Original		
8 oz serving		
Water	240.00	
AvenOlait®	20.00	
Cane Sugar	4.00	
Salt	0.10	
Natural Vanilla Extract	0.04	



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- Avenolait® Oat Dairy—alternative beverages
- Vegotein<sup>TM</sup> Pea Protein—beverages
- High-Acid beverage applications

### **Coming Next!**

Axiom Foods' Innovation Team plans to expand and meet the beverage application purposes of Carbonated and Alcoholic beverages in the near future, so stay tuned.

Quality certification and analysis plus spec sheets are available for all Axiom ingredients, upon request at:

info@axiomfoods.com

