# Complete Food-C

# Nutrient-Rich Vegan Protein Shake Mix\*

# **Clinical Applications**

Supports Protein Metabolism and Healthy Body Composition\*

Supports Cardiovascular Health\*

Supports Gastrointestinal Health\*

Supports Antioxidant Systems\*

Provides Essential Micronutrients\*

Complete Food-C is a nutrient-rich shake mix ideal for vegans, individuals sensitive or allergic to soy and/or dairy, or those seeking an alternative source of quality protein. Complete Food features VegaPro—, an all-natural pea and rice protein blend; Aminogen<sub>5</sub>, a plant enzyme that enhances protein digestibility and absorption; and Artinia<sub>3</sub> chitin-glucan, a novel fiber that supports antioxidant systems in the body. This fructose-free formula provides an array of micronutrients as well, including high-potency vitamins C and B12, activated B vitamins, and Albion<sub>3</sub> TRAACS<sub>3</sub> chelated minerals (the real amino acid chelate system).\*

#### Available in French Vanilla & Dutch Chocolate

## Discussion

VegaPro∼, HEALTH MATRIX's proprietary blend of highly digestible pea protein concentrate, pea protein isolate, glycine, taurine, rice protein concentrate, and L-glutamine, is the cornerstone of Complete Food. Aminogen is added to enhance protein digestion and absorption.<sub>[1]</sub> The combination of pea protein and rice protein achieves an amino acid score of 100% and supports protein metabolism and healthy body composition.\*<sub>[2]</sub>

Protein is required for cell and tissue repair, hormone and enzyme synthesis, and a variety of metabolic functions. It is especially important for maintaining lean body mass during increased physical activity. Protein supplementation has been found to be a determining factor in increasing fat-free mass and exercise-stimulated fat oxidation. Subjects who consumed a significantly higher protein intake (~80 g/d versus ~59 g/d) experienced a significant increase in fat oxidation and fat-free mass with a significant decrease in fat mass and body fat percentage.<sub>[3]</sub> Studies have indicated that increased protein intake enhances satiety<sub>[2,4-6]</sub> and supports diminished food intake during subsequent meals.<sub>[7]</sub> One randomized crossover study suggested that pea protein was superior to milk protein with respect to satiety and intermeal interval.<sub>[8]</sub> Research has also demonstrated that pea protein stimulates release of cholecystokinin and glucagon-like peptide 1, gastrointestinal hormones that modulate appetite sensations.\*[9]

While pea-based protein provides a satisfying and versatile source of protein, it also supports cardiovascular health. Animal studies have suggested that it positively affects lipid homeostasis by modulating gene expression; that is, upregulating genes that affect hepatic cholesterol uptake and downregulating genes that affect fatty acid synthesis.\*[10,11]

Artinias Chitin-Glucan is incorporated into Complete Food to support antioxidant activity and cardiovascular health. Artinia is a purified, insoluble, gluten-free fiber ingredient composed of chitin (N-acetyl-D-glucosamine) and beta(1,3)-glucan chains.[12] Artinia has been researched for its effects on maintaining oxidative balance and artery health, key components of cardiovascular health. A 12-week animal study indicated that chitin-glucan supports cardiovascular health by maintaining healthy arteries, reducing cardiac superoxide anion and liver malondialdehyde (markers of oxidation), and enhancing superoxide dismutase and glutathione peroxidase activity.\*[12]

Human trials have revealed significantly positive results as well. A six-week, multicenter, randomized, double-blind, placebo-controlled study (n = 130) of Artinia revealed that 1.5 g/d significantly supported subjects' LDL cholesterol at levels already within normal range, and 4.5 g/d significantly supported subjects' natural antioxidant systems and oxidative balance of LDL cholesterol.[14,15] A 28-day pilot study found Artinia to be safe and well-tolerated at a dose of

4.5 g/d.[16] Complete Food provides 2.25 g of Artinia per serving. Artinia is a healthy alternative to phytosterol supplementation and has not been observed to interfere with absorption of fat-soluble vitamins or antioxidants.\*

Micronutrient Support Complete Food delivers a balanced profile of vitamins, minerals, and antioxidants, nutrients vital to supporting the vast array of metabolic processes in the body.<sub>[17]</sub> B vitamins are present in their bioactive forms, including riboflavin 5'-phosphate, pyridoxal 5'-phosphate, methylcobalamin, and 5-methyltetrahydrofolate as Quatrefolics.\*<sub>[18]</sub>

Fructose-Free Complete Food contains dried cane syrup and stevia in place of fructose. Animal and human research suggests that superfluous consumption of fructose increases visceral adiposity, disrupts lipid regulation, and elevates cardiometabolic risk.\*[19-23]

Glutamine The conditionally essential amino acid glutamine is important for replenishing amino acid stores, especially after exercise or stress [24] Glutamine also supports intestinal cell proliferation and thereby preserves gut barrier function and intestinal health.\*[25-27]

Inulin This soluble fiber is fermented by colonic bacteria into short-chain fatty acids that exert a positive effect on lipid metabolism and support healthy colon transit time.\*[28,29]

**Complete Food Supplement Facts** 

Complete Food Suppleme		
Serving Size: 2 scoops (about 40		
Amount Per Se	rving	%DV <sub>‡</sub>
Calories		150
Calories from Fat Total Fat	r ~	40 8%
Saturated Fat	5 g 2 g	10%
Total Carbohydrate	2 g 14 g	5%
Dietary Fiber	7 g	28%
Sugars	, 9 5 g	2070
Protein	15 g	30%
Vitamin A (75% as natura)	1875 ) Ŭ	38%
beta-carotene and 25% as	10.0.10	00,0
retinyl palmitate)		
Vitamin C (as sodium	125 mg	208%
ascorbate, potassium	·	
ascorbate, zinc ascorbate,		
and calcium ascorbate)		
Vitamin E (as d-alpha	- 50 IU	167%
tocopheryl succinate and		
mixed tocopherols)		
Thiamin (as thiamine	5 mg	333%
mononitrate)		
Riboflavin (as riboflavin 5'-	5 mg	294%
phosphate sodium)		
Niacin (as niacinamide and	16 mg	80%
nlacin)	_	/
Vitamin B6 (as pyridoxal 5'-	5 mg	250%
phosphate)	100	050/
Folate (as Quatrefolics	100 mcg	25%
(6S)-5- methyltetrahydrofolic acid,		
glucosamine salt)		
Vitamin B12 (as	125 mca	2083%
methylcobalamin)	120 meg	200370
Biotin	250 mcg	83%
Pantothenic Acid (as d-	50 mg	500%
calcium pantothenate)	oo mg	00070
Calcium (as DimaCaledi-	30 mg	3%
calcium malate, d-calcium	<b>3</b>	***
pantothenate, and calcium		
ascorbate)		
iron (naturally occurring)	3.6 mg	20%
lodine (as potassium	25 mcg	17%
iodide)	_	
Magnesium (as Albion₅di-	25 mg	6%
magnesium malate)		
Zinc (as TRAACS» zinc	3.25 mg	22%
bisglycinate chelate)		
Selenium (as Albion₅	25 mcg	36%
selenium glycinate		
complex)		•••
Manganese (as TRAACS»	0.125 mg	6%
manganese bisglycinate		
chelate)	405	40.407
Chromium (as TRAACS₃	125 mcg	104%
chromium nicotinate		
glycinate chelate) Molybdenum (as TRAACS₃	12.5 mcg	17%
molybdenum glycinate	iz.o illog	1170
chelate)		
Sodium (naturally	280 mg	12%
Socialit (notation)	zoo mg	1270

occurring) Potassium (from ingredients with naturally occurring potassium and Albiona potassium glycinate complex)	500 mg	14%
Artinia» (chitin-glucan from Aspergillus niger)	2.25 g	. **
Aminogen» (proprietary enzyme blend from Aspergillus niger and Aspergillus oryzae)	300 mg	**
Choline (as choline dihydrogen citrate)	9 mg	**
Inositol	9 mg	**
PABA (para-aminobenzoic acid)	3,25 mg	**
Vanadium (as TRAACS» vanadium nicotinate glycinate chelate)	187.5 mcg	**
*Percent Daily Values (DV) are bas established.	ed on a 2,000 calorie diet. ** I	Daily Value (DV) not
Other Ingredients: VegaPro- (HE/concentrate, pea protein isolate, gly glutamine), dried cane syrup, inulin medium-chain triglyceride oil, tripot silica, and stevia leaf extract	/cine, taurine, rice protein cond (from chicory), sunflower oil, r	centrate, and L- natural flavors (no MSG),

Typical Amino Acid Profile Per Serving:

	~	
675 mg	Methionine	166 mg
1,352 mg	Phenylalanine	856 mg
1,824 mg	Proline	682 mg
148 mg	Serine	840 mg
2,661 mg	Threonine	500 mg
644 mg	Taurine	586 mg
390 mg	Tryptophan	154 mg
726 mg	Tyrosine	601 mg
1,312 mg	Valine	787 mg
-		1,143 mg
	1,824 mg 148 mg 2,661 mg 644 mg 390 mg 726 mg	1,352 mg Phenylalanine 1,824 mg Proline 148 mg Serine 2,661 mg Threonine 644 mg Taurine 390 mg Tryptophan 726 mg Tyrosine

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