

# Complete Food-V

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-V** 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®, a plant enzyme that enhances protein digestibility and absorption; and Artinia® 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® TRAACS® 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.<sup>[1]</sup> The combination of pea protein and rice protein achieves an amino acid score of 100% and supports protein metabolism and healthy body composition.\*<sup>[2]</sup>

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.<sup>[3]</sup> Studies have indicated that increased protein intake enhances satiety<sup>[2,4-6]</sup> and supports diminished food intake during subsequent meals.<sup>[7]</sup> One randomized crossover study suggested that pea protein was superior to milk protein with respect to satiety and intermeal interval.<sup>[8]</sup> Research has also demonstrated that pea protein stimulates release of cholecystokinin and glucagon-like peptide 1, gastrointestinal hormones that modulate appetite sensations.\*<sup>[9]</sup>

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.\*<sup>[10,11]</sup>

**Artinia® 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.<sup>[12]</sup> 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.\*<sup>[13]</sup>

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.<sup>[14,15]</sup> A 28-day pilot study found Artinia to be safe and well-tolerated at a dose of

4.5 g/d.<sup>[16]</sup> 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.<sup>[17]</sup> B vitamins are present in their bioactive forms, including riboflavin 5'-phosphate, pyridoxal 5'-phosphate, methylcobalamin, and 5-methyltetrahydrofolate as Quatrefolic®.<sup>\*[18]</sup>

**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.<sup>\*[19-23]</sup>

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

**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.<sup>\*[28,29]</sup>

### Complete Food Supplement Facts

Serving Size: 2 scoops (about 40 g) Servings Per Container: About 14

Amount Per Serving		%DV <sub>t</sub>
Calories		150
Calories from Fat		40
Total Fat	5 g	8%
Saturated Fat	2 g	10%
Total Carbohydrate	14 g	5%
Dietary Fiber	7 g	28%
Sugars	5 g	**
Protein	15 g	30%
Vitamin A (75% as natural beta-carotene and 25% as retinyl palmitate)	1875 IU	38%
Vitamin C (as sodium ascorbate, potassium ascorbate, zinc ascorbate, and calcium ascorbate)	125 mg	208%
Vitamin E (as d-alpha tocopheryl succinate and mixed tocopherols)	50 IU	167%
Thiamin (as thiamine mononitrate)	5 mg	333%
Riboflavin (as riboflavin 5'-phosphate sodium)	5 mg	294%
Niacin (as niacinamide and niacin)	16 mg	80%
Vitamin B6 (as pyridoxal 5'-phosphate)	5 mg	250%
Folate (as Quatrefolic® (6S)-5-methyltetrahydrofolic acid, glucosamine salt)	100 mcg	25%
Vitamin B12 (as methylcobalamin)	125 mcg	2083%
Biotin	250 mcg	83%
Pantothenic Acid (as d-calcium pantothenate)	50 mg	500%
Calcium (as DimaCal® di-calcium malate, d-calcium pantothenate, and calcium ascorbate)	30 mg	3%
Iron (naturally occurring)	3.6 mg	20%
Iodine (as potassium iodide)	25 mcg	17%
Magnesium (as Alblon® di-magnesium malate)	25 mg	6%
Zinc (as TRAACS® zinc bisglycinate chelate)	3.25 mg	22%
Selenium (as Alblon® selenium glycinate complex)	25 mcg	36%
Manganese (as TRAACS® manganese bisglycinate chelate)	0.125 mg	6%
Chromium (as TRAACS® chromium nicotinate glycinate chelate)	125 mcg	104%
Molybdenum (as TRAACS® molybdenum glycinate chelate)	12.5 mcg	17%
Sodium (naturally)	280 mg	12%

occurring)		
Potassium (from Ingredients with naturally occurring potassium and Albion® potassium glycinate complex)	500 mg	14%
Artinia® (chitin-glucan from <i>Aspergillus niger</i> )	2.25 g	**
Aminogen® (proprietary enzyme blend from <i>Aspergillus niger</i> and <i>Aspergillus oryzae</i> )	300 mg	**
Choline (as choline dihydrogen citrate)	9 mg	**
Inositol	9 mg	**
PABA (para-aminobenzol acid)	3.25 mg	**
Vanadium (as TRAACS® vanadium nicotinate glycinate chelate)	187.5 mcg	**

Percent Daily Values (DV) are based on a 2,000 calorie diet. \*\* Daily Value (DV) not established.

**Other Ingredients:** VegaPro™ (HEALTH MATRIX's proprietary blend of pea protein concentrate, pea protein isolate, glycine, taurine, rice protein concentrate, and L-glutamine), dried cane syrup, inulin (from chicory), sunflower oil, natural flavors (no MSG), medium-chain triglyceride oil, tripotassium citrate, cellulose gum, xanthan gum, guar gum, silica, and stevia leaf extract

#### Typical Amino Acid Profile Per Serving:

Alanine	675 mg	Methionine	166 mg
Arginine	1,352 mg	Phenylalanine	856 mg
Aspartic Acid	1,824 mg	Proline	682 mg
Cysteine	148 mg	Serine	840 mg
Glutamic Acid	2,661 mg	Threonine	500 mg
Glycine	644 mg	Taurine	586 mg
Histidine	390 mg	Tryptophan	154 mg
Isoleucine	726 mg	Tyrosine	601 mg
Leucine	1,312 mg	Valine	787 mg
Lysine			1,143 mg

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