# Fit Lean Food Complete

## Sugar- & Stevia-Free‡

**Available in French Vanilla and Dutch Chocolate**

‡This formula is not a low-calorie dietary supplement. Please see the Supplement Facts panel for more details.

## Clinical Applications

- Supports Protein Metabolism and Healthy Body Composition*
- Supports Cardiovascular Health*
- Supports Gastrointestinal Health*
- Supports Antioxidant Systems*
- Provides Essential Micronutrients*

***Fit Lean Food Complete*** *is a nutrient-rich shake mix ideal for individuals sensitive or allergic to soy and/or dairy or those seeking a high-quality source of plant-based protein. Fit Lean Food Complete Sugar- & Stevia-Free‡ features VegaPro™, an all-natural pea and rice protein blend; Aminogen®, a plant enzyme that enhances protein digestibility and absorption; and KiOtransine® chitin-glucan, a novel fiber that supports antioxidant systems in the body. This sugar- and stevia-free, vegan formula also provides an array of micronutrients, including high-potency vitamins C and B12, activated B vitamins, and Albion® chelated minerals (the real amino acid chelate system).**

## Discussion

**VegaPro™**, XYMOGEN's proprietary blend of highly digestible pea protein isolate, glycine, taurine, rice protein concentrate, and L-glutamine, is the cornerstone of Fit Lean Food Complete Sugar- & Stevia-Free. Aminogen is added to enhance protein digestion and absorption.[1] The combination of pea protein and rice protein achieves an amino acid score of 100% and supports protein metabolism and healthy body composition.*[2]

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.[3] Studies have indicated that increased protein intake enhances satiety[2,4-6] and supports diminished food intake during subsequent meals.[7] One randomized crossover study suggested that pea protein was superior to milk protein with respect to satiety and intermeal interval.[8] 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]

**Chitin-Glucan** is incorporated into Fit Lean Food Complete Sugar- & Stevia-Free to support antioxidant activity and cardiovascular health. This purified, insoluble, gluten-free fiber ingredient composed of chitin (N-acetyl-D-glucosamine) and beta(1,3)-glucan chains has been researched for its effects on maintaining oxidative balance and artery health, key components of cardiovascular health.[12,13] 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) revealed that 1.5 g/d of chitin-glucan 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.[13] Fit Lean Food Complete Sugar- & Stevia-Free provides 2.25 g of chitin-glucan per serving.*

**Micronutrient Support** Fit Lean Food Complete Sugar- & Stevia-Free delivers a balanced profile of vitamins, minerals, and antioxidants, nutrients vital to supporting the vast array of metabolic processes in the body.[14] B vitamins are present in their bioactive forms, including riboflavin 5'-phosphate, pyridoxal 5'-phosphate, methylcobalamin, and 5-methyltetrahydrofolate as Quatrefolic®.*[15]

**Sugar- and Stevia-Free** This formula is sweetened with monk fruit extract in place of sugar or stevia. Animal and human research suggests that superfluous consumption of added sugars increases adiposity, disrupts lipid regulation, and elevates cardiometabolic risk.*[16-20]

**Glutamine** The conditionally essential amino acid glutamine is important for replenishing amino acid stores, especially after exercise or stress.[21] Glutamine also supports intestinal cell proliferation and thereby preserves gut barrier function and intestinal health.*[22-24]

**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.*[25,26]



***These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**

Cardiovascular

Gastrointestinal Support

Sports Nutrition

## Fit Lean Food Complete French Vanilla Supplement Facts

Serving Size: 1 Packet (about 38 g)

| | Amount Per Serving | %DV |
|---|---|---|
| Calories | 150 | |
| Total Fat | 5 g | 6%† |
| Saturated Fat | 2.5 g | 13%† |
| Total Carbohydrate | 11 g | 4%† |
| Dietary Fiber | 7 g | 25% |
| Protein (from Pea Protein Isolate and Rice Protein Concentrate) | 15 g | |
| Vitamin A (75% as natural beta-carotene and 25% as retinyl palmitate) | 560 mcg | 62% |
| Vitamin C (as sodium ascorbate, potassium ascorbate, zinc ascorbate, and calcium ascorbate) | 125 mg | 139% |
| Vitamin E (as d-alpha tocopheryl succinate) | 33.5 mg | 223% |
| Thiamin (as thiamine mononitrate) | 5 mg | 417% |
| Riboflavin (as riboflavin 5'-phosphate sodium) | 5 mg | 385% |
| Niacin (as niacinamide and niacin) | 16 mg | 100% |
| Vitamin B6 (as pyridoxal 5'-phosphate) | 5 mg | 294% |
| Folate (as [6S]-5-methyltetrahydrofolic acid, glucosamine salt)[S1] | 170 mcg DFE | 43% |
| Vitamin B12 (as methylcobalamin) | 125 mcg | 5208% |
| Biotin | 250 mcg | 833% |
| Pantothenic Acid (as d-calcium pantothenate) | 50 mg | 1000% |
| Choline (as choline dihydrogen citrate) | 9 mg | 2% |
| Calcium (as dicalcium malate[S2] and ingredients with naturally occurring calcium) | 45 mg | 3% |
| Iron (naturally occurring) | 3 mg | 17% |
| Iodine (as potassium iodide) | 25 mcg | 17% |
| Magnesium (as di-magnesium malate)[S2] | 25 mg | 6% |
| Zinc (as zinc bisglycinate chelate)[S2] | 3.25 mg | 30% |
| Selenium (as selenium glycinate)[S2] | 25 mcg | 45% |
| Manganese (as manganese bisglycinate chelate)[S2] | 0.125 mg | 5% |
| Chromium (as chromium nicotinate glycinate chelate)[S2] | 125 mcg | 357% |
| Molybdenum (as molybdenum glycinate chelate)[S2] | 12.5 mcg | 28% |
| Sodium (naturally occurring) | 340 mg | 15% |
| Potassium (from tripotassium citrate, potassium glycinate complex[S2], and ingredients with naturally occurring potassium) | 510 mg | 11% |
| Chitin-glucan (from *Aspergillus niger*)[S3] | 2.25 g | ** |
| Mixed Tocopherols | 18 mg | ** |
| Inositol | 9 mg | ** |
| PABA (*para*-aminobenzoic acid) | 3.25 mg | ** |
| Vanadium (as vanadium nicotinate glycinate chelate)[S2] | 187.5 mcg | ** |

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

**Other Ingredients:** Inulin (from chicory), natural flavors (no MSG), high-oleic sunflower oil, glycine, medium-chain triglyceride oil, taurine, cellulose gum, xanthan gum, fungal proteases[S4], guar gum, monk fruit extract, and L-glutamine.

**DIRECTIONS:** Mix the contents of one packet (38 g) in 6-8 oz cold water and consume. Adjust amount of water according to thickness desired. Or use as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional.

**STORAGE:** Keep closed in a cool, dry place out of reach of children.

**FORMULATED TO EXCLUDE:** Wheat, gluten, yeast, soy protein, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, sesame, artificial colors, and artificial sweeteners.

‡This formula is not a low-calorie dietary supplement. Please see the Supplement Facts panel for more details.

Quatrefolic® S1. Quatrefolic® is a registered trademark of Gnosis S.p.A. Produced under U.S. patent 7,947,662.

S2. Albion® and the Albion Gold Medallion® are registered trademarks of Balchem Corporation or its subsidiaries.

VegaPro™ 100% VEGAN 100% GLUTEN-FREE

S3. KiOtransine® is a registered trademark of KitoZyme S.A.

AMINOGEN® S4. AMINOGEN® is a registered trademark of Innophos Nutrition, Inc.

Typical Amino Acid Profile Per Serving:

| | | | |
|---|---|---|---|
| Alanine | 800 mg | Methionine | 210 mg |
| Arginine | 1,610 mg | Phenylalanine | 1,020 mg |
| Aspartic Acid | 2,120 mg | Proline | 830 mg |
| Cysteine | 190 mg | Serine | 980 mg |
| Glutamic Acid | 3,110 mg | Threonine | 500 mg |
| Glycine | 2,760 mg | Taurine | 720 mg |
| Histidine | 460 mg | Tryptophan | 190 mg |
| Isoleucine | 830 mg | Tyrosine | 710 mg |
| Leucine | 1,550 mg | Valine | 930 mg |
| Lysine | 1,320 mg | | |

## References


1. Oben J, Kothari SC, Anderson ML. An open label study to determine the effects of an oral proteolytic enzyme system on whey protein concentrate metabolism in healthy males. *J Int Soc Sports Nutr*. 2008 Jul 24;5:10. [PMID: 18652668]
2. Westerterp-Plantenga MS, Lemmens SG, Westerterp KR. Dietary protein - its role in satiety, energetics, weight loss and health. *Br J Nutr*. 2012 Aug;108 Suppl 2:S105-12. Review. [PMID: 23107521]
3. Soenen S, Plasqui G, Smeets AJ, et al. Protein intake induced an increase in exercise stimulated fat oxidation during stable body weight. *Physiol Behav*. 2010 Dec 2;101(5):770-4. [PMID: 20826169]
4. Halton TL, Hu FB. The effects of high protein diets on thermogenesis, satiety and weight loss: a critical review. *J Am Coll Nutr*. 2004 Oct;23(5):373-85. Review. [PMID: 15466943]
5. Anderson GH, Moore SE. Dietary proteins in the regulation of food intake and body weight in humans. *J Nutr*. 2004 Apr;134(4):974S-9S. Review. [PMID: 15051857]
6. Veldhorst M, Smeets A, Soenen S, et al. Protein-induced satiety: effects and mechanisms of different proteins. *Physiol Behav*. 2008 May 23;94(2):300-7. Review. [PMID: 18282589]
7. Johnstone AM, Stubbs RJ, Harbron CG. Effect of overfeeding macronutrients on day-to-day food intake in man. *Eur J Clin Nutr*. 1996 Jul;50(7):418-30. [PMID: 8862477]
8. Diepvens K, Häberer D, Westerterp-Plantenga M. Different proteins and biopeptides differently affect satiety and anorexigenic/orexigenic hormones in healthy humans. *Int J Obes (Lond)*. 2008 Mar;32(3):510-8. [PMID: 18345020]
9. Geraedts MC, Troost FJ, Tinnemans R, et al. Release of satiety hormones in response to specific dietary proteins is different between human and murine small intestinal mucosa. *Ann Nutr Metab*. 2010;56(4):308-13. [PMID: 20530962]
10. Rigamonti E, Parolini C, Marchesi M, et al. Hypolipidemic effect of dietary pea proteins: impact on genes regulating hepatic lipid metabolism. *Mol Nutr Food Res*. 2010 May;54 Suppl 1:S24-30. [PMID: 20077421]
11. Parolini C, Manzini S, Busnelli M, et al. Effect of the combinations between pea proteins and soluble fibres on cholesterolaemia and cholesterol metabolism in rats. *Br J Nutr*. 2013 Oct;110(8):1394-401. [PMID: 23458494]
12. Berecochea-Lopez A, Decordé K, Ventura E, et al. Fungal chitin-glucan from Aspergillus niger efficiently reduces aortic fatty streak accumulation in the high-fat fed hamster, an animal model of nutritionally induced atherosclerosis. *J Agric Food Chem*. 2009 Feb 11;57(3):1093-8. [PMID: 19154104]
13. Bays HE, Evans JL, Maki KC, et al. Chitin-glucan fiber effects on oxidized low-density lipoprotein: a randomized controlled trial. *Eur J Clin Nutr*. 2013 Jan;67(1):2-7. [doi:10.1038/ejcn.2012.121 ]
14. Ames BN. A role for supplements in optimizing health: the metabolic tune-up. *Arch Biochem Biophys*. 2004 Mar 1;423(1):227-34. [PMID: 14989256]
15. Quatrefolic. http://www.quatrefolic.com/. Accessed January 24, 2017.
16. Stanhope KL, Schwarz JM, Keim NL, et al. Consuming fructose-sweetened, not glucose-sweetened, beverages increases visceral adiposity and lipids and decreases insulin sensitivity in overweight/obese humans. *J Clin Invest*. 2009 May;119(5):1322-34. [PMID: 19381015]
17. Pollock NK, Bundy V, Kanto W, et al. Greater fructose consumption is associated with cardiometabolic risk markers and visceral adiposity in adolescents. *J Nutr*. 2012 Feb;142(2):251-57. [PMID: 22190023]
18. Stanhope KL, Havel PJ. Fructose consumption: recent results and their potential implications. *Ann N Y Acad Sci*. 2010 Mar;1190:15-24. Review. [PMID: 20388133]
19. Stanhope KL, Havel PJ. Fructose consumption: considerations for future research on its effects on adipose distribution, lipid metabolism, and insulin sensitivity in humans. *J Nutr*. 2009 Jun;139(6):1236S-1241S. [PMID: 19403712]
20. DiNicolantonio JJ, Berger A. Added sugars drive nutrient and energy deficit in obesity: a new paradigm. *Open Heart*. 2016 Aug 2;3(2):e000469. [PMID: 27547437]
21. Castell L. Glutamine supplementation in vitro and in vivo, in exercise and in immunodepression. *Sports Med*. 2003;33(5):323-45. Review. [PMID: 12696982]
22. Chwals WJ. Regulation of the cellular and physiological effects of glutamine. *Mini Rev Med Chem*. 2004 Oct;4(8):833-8. Review. [PMID: 15544544]
23. McAnena OJ, Moore FA, Moore EE, et al. Selective uptake of glutamine in the gastrointestinal tract: confirmation in a human study. *Br J Surg*. 1991 Apr;78(4):480-82. [PMID: 1903318]
24. Souba WW, Klimberg VS, Plumley DA, et al. The role of glutamine in maintaining a healthy gut and supporting the metabolic response to injury and infection. *J Surg Res*. 1990 Apr;48(4):383-91. Review. [PMID: 2187115]
25. Roberfroid M. Dietary fiber, inulin, and oligofructose: a review comparing their physiological effects. *Crit Rev Food Sci Nutr*. 1993;33(2):103-48. Review. [PMID: 8257475]
26. Flamm G, Glinsmann W, Kritchevsky D, et al. Inulin and oligofructose as dietary fiber: a review of the evidence. *Crit Rev Food Sci Nutr*. 2001 Jul;41(5):353-62. Review. [PMID: 11497328]


7 22537 50926 8

**All XYMOGEN® Formulas Meet or Exceed cGMP Quality Standards.**

***These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**

© XYMOGEN
DRS-315
Rev. 09/03/25