i5[™] Energize



Available in Vanilla Latte

Discussion

i5 Energize™ is an innovative and healthy way to add protein, micronutrients, immunoglobulins, and fiber to your daily routine. This nutritious and delicious shake provides antioxidant, detoxification, and energy support. It can be part of a healthy and energizing breakfast, a great pre-workout shake, or a quick pick-me-up in the afternoon. i5 Energize is a nutrient-rich alternative to common energy drinks.*

VegaPro™ XYMOGEN's proprietary blend of pea protein isolate, taurine, rice protein concentrate, L-glutamine, and glycine provides 18 g of plant-based protein per serving of i5 Energize. VegaPro is easily digested, is gluten-free, and achieves an amino acid score of 100%.^[1,2] This amino acid profile supports protein metabolism and lean body mass. Aminogen® enhances protein digestibility and absorption.*

Coffee Fruit Extract and Green Coffee Bean Extract Blend i5
Energize contains a propriety blend of KonaRed® coffee fruit extract, green coffee bean extract, and caffeine anhydrous. Hawaiian KonaRed coffee fruit extract is a natural source of chlorogenic acids and their derivatives quinic acid and ferulic acid. Chlorogenic acids from green coffee bean extract are readily metabolized by humans and have been researched specifically for their positive effects on cytokine balance and antioxidant support. Animal and human studies suggest that these chlorogenic acids can be used safely and help maintain vasoreactivity and blood pressure already within the normal range. *16-81

ActivNutrients® without Copper & Iron The USDA Dietary Guidelines suggest that dietary supplements can help fulfill our micronutrient needs. ^[9] The balanced array of vitamins, minerals, and cofactors in i5 Energize provides a micronutrient foundation that helps support healthy energy production and metabolism. ^[10] ActivNutrients without Copper & Iron delivers highly bioavailable micronutrients, such as Albion® TRAACS® minerals (the real amino acid chelate system), natural-source vitamin E as mixed tocopherols, and activated B vitamins, including 5-methyltetrahydrofolate as Quatrefolic®.*^[11]

Clinical Applications

- » Supports Healthy Energy Production and Metabolism*
- » Supports Immune Function by Providing Immunoglobulins and Other Immune Factors*
- » Supports Intestinal Health*
- » Supports Healthy Intestinal Cytokine Balance*
- » Supports Healthy Body Composition*
- » Supports Detoxification and Antioxidant Systems*

i5™ Energize is an all-natural, nutrient-dense shake mix designed to support healthy energy production, gastrointestinal integrity, cytokine balance, and the body's natural ability to detoxify. It is a wholesome alternative for individuals seeking to maintain robust energy levels, enhance their workout, or simply maintain overall health and wellness. This unique, fructose-free formula contains the same micronutrient profile (different dosages) found in XYMOGEN's ActivNutrients® without Copper & Iron, along with supplemental methylcobalamin (activated vitamin B12) and whole coffee fruit standardized to chlorogenic acid. i5 Energize features VegaPro™, a non-GMO, pea-based protein; IgG 2000 CWP™, a bovine-derived immunoglobulin concentrate; truebroc®, glucoraphanin from broccoli seed extract; and arabinogalactan, a prebiotic. i5 Energize provides 80 mg of caffeine per serving.*

IgG 2000 CWP™ is an immunoglobulin concentrate from colostral whey peptides that delivers a minimum of 40% IgG immunoglobulin along with an array of compounds, including growth factors, sialic acid, lactoferrin, proline-rich peptides (PRPs), oligosaccharides, and gangliosides. Each of these components provides the user with different and complementary health benefits, such as fundamental support of immune function and modulation, lean body mass, brain and thymus health, microbiota modulation, and cytokine balance.*¹²

Oral consumption of immunoglobulins derived from colostrum is a means of supporting passive immunity, protecting the body, and eliminating unwanted molecules. [13-16] The most versatile, IgG, is capable of carrying out all of the functions of immunoglobulin molecules, accounting for IgG 2000 CWP's broad range of immune-supportive effects. [17] Review of the research confirms that bovine colostrum supplementation confers other benefits, such as the maintenance of gastrointestinal integrity. [18-20] Oral immunoglobulins have been used in sports nutrition to support lean body mass, [21] physical exercise, and recovery following high-intensity training. [18,22] The 2.5 grams of immunoglobulins in each serving of i5 Energize contribute to individual dosing requirements.*

OncoPLEX™ (glucoraphanin) This patented plant-based ingredient, also known as sulforaphane glucosinolate, is extracted from one of its most concentrated cruciferous sources—broccoli seeds. [23] An abundance of research demonstrates that when glucoraphanin is broken down to its active form, sulforaphane, it safely and effectively upregulates the body's natural phase II detoxification enzymes. [24-26] This activity in turn supports antioxidant activity and helps protect cells, cell membranes, and tissues from free-radical damage.*

Arabinogalactan Sourced from the larch tree, arabinogalactan is considered an excellent source of fiber, a prebiotic, and a precursor to short-chain fatty acids, all elements that help support gastrointestinal health.*[27,28]

i5™ Energize Vanilla Latte Supplement Facts

Serving Size: 1 Packet (about 46 g)

	Amount Per Serving	%Daily Value
Calories	170	
Total Fat	4 g	5%
Saturated Fat	2 g	10%
Total Carbohydrate	19 g	7%
Dietary Fiber	5 g	18%
Total Sugars	4 g	*
Includes 4g Added Sugars		8%
Protein (from pea protein isolate and rice protein concentrate)	18 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) $ \\$	62.5 mg	69%
Vitamin D3 (cholecalciferol)	1.25 mcg (50 IU)	6%
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)	2,500 mcg	104167%
Biotin	250 mcg	833%
Pantothenic Acid (as d-calcium pantothenate)	50 mg	1,000%
Choline (as choline dihydrogen citrate)	9 mg	29
Calcium (as dicalcium malateS2 and ingredients with naturally occurring calcium)	45 mg	3%
Iron (naturally occurring)	3 mg	17%
lodine (as potassium iodide)	25 mcg	179
Magnesium (as di-magnesium malate) ^{S2}	25 mg	69
Zinc (as zinc bisglycinate chelate) ^{S2}	3.25 mg	30%
Selenium (as selenium glycinate complex) ^{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)	360 mg	16%
Potassium (from tripotassium citrate, potassium glycinate complex ^{\$2} , and ingredients with naturally occurring potassium)	345 mg	7%
Immunoglobulin concentrate Immunoglobulin G (IgG)	2.5 g 1 g	*
Arabinogalactan (from <i>Larix laricina</i>)(bark)	1 g	*
Proprietary Energizing Blend Whole Coffee Fruit (<i>Coffea arabica</i>)(whole fruit)(40% chlorogenic acid) and caffeine anhydrous, typically yielding a total of 80 mg of caffeine	585 mg	*
Glucoraphanin (from broccoli extract)(Brassica oleracea italica)(seed) ^{S3}	30 mg	**
Mixed Tocopherols	18 mg	**
Inositol	9 mg	*
PABA (para-aminobenzoic acid)	3.25 mg	*
Vanadium (as vanadium nicotinate glycinate chelate) ^{S2}	187.5 mcg	*:

cellulose gum, xanthan gum, taurine, medium-chain triglyceride oil, fungal proteases^{sa}, guar gum, stevia leaf extract, L-glutamine, glycine, and silica.

DIRECTIONS: Blend, shake, or briskly stir the contents of one packet (46 g) into 8-10 oz chilled water and consume once daily, or as directed by your healthcare professional. Adjust amount of water to desired sweetness and thickness.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Caffeine should not be combined with synephrine or ephedrine. Use cautiously in individuals who have a history of abnormal heart rhythm.

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

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



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





S3. TrueBroc® Produced under US patent 6,521,818 licensed from Brassica Protection Products LLC; truebroc is a registered trademark of Brassica Protection Products LLC.



References

- Fredrikson M. Biot P. Alminger MI., et al. Production process for high-quality pea-protein isolate with low content of oligosaccharides and phytate. J Agric Food Chem. 2001 Mar;49(3):1208-12. [PMID: 11312837]
- Gausserès N. Mahé S. Benamouzig R. et al. [15N]-labeled pea flour protein nitrogen exhibits good ileal digestibility and postprandial retention in humans. J Nutr. 1997 Jun;127(6):1160-65. [PMID: 9187631]
- KonaRed. Science—the most powerful antioxidant potential fruits. http://www.konared. com/science-most-powerful-antioxidant-fruits/. Accessed April 22, 2014.
- American Institute for Cancer Research. Foods That Fight Cancer: Coffee. http://www.aicr. org/foods-that-fight-cancer/coffee.html. Accessed April 22, 2014.
- Farah A, Monteiro M, Donangelo CM, et al. Chlorogenic acids from green coffee extract are highly bioavailable in humans. J Nutr. 2008 Dec;138(12):2309-15. [PMID: 19022950]
- Watanabe T, Arai Y, Mitsui Y, et al. The blood pressure-lowering effect and safety of chlorogenic acid from green coffee bean extract in essential hypertension. Clin Exp Hypertens. 2006 Jul;28(5):439-49. [PMID: 16820341]
- Ochiai R, Jokura H, Suzuki A, et al. Green coffee bean extract improves human vasoreactivity. Hypertens Res. 2004 Oct;27(10):731-37. [PMID: 15785008]
- Natural Standard Database. Green Coffee. http://www.naturalstandard.com/databases/ herbssupplements/greencoffee.asp?#undefined. Accessed June 3, 2013.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services Dietary Guidelines for Americans, 2010. 7th ed. Washington, DC: U.S. Government Printing Office; December 2010:33-42. http://www.health.gov/dietaryguidelines/dga2010/ DietaryGuidelines2010.pdf. Accessed April 2, 2013.
- 10. 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]
- 11. Quatrefolic. http://www.quatrefolic.com/4thGeneration.html. Accessed April 22, 2014.
- Godhia M, Patel N. Colostrum—its composition, benefits as a nutraceutical: a review. Curr Res Nutr Food Sci. 2013;1(1):37-47. http://dx.doi. org/10.12944/CRNFSJ.1.1.04
- Hurley D. Establishment of the effects of colostrally derived protein food supplements on human and animal health [dissertation]. Brookings, SD: South Dakota State University;
- 14. Hurley WL, Theil PK. Perspectives on immunoglobulins in colostrum and milk. *Nutrients*. 2011 Apr;3(4):442-74. Review. [PMID: 22254105]
- 15. Rump JA, Arndt R, Arnold A, et al. Treatment of diarrhoea in human immunodeficiency virus-infected patients with immunoglobulins from bovine colostrum. Clin Investig. 1992 Jul;70(7):588-94. [PMID: 1392428]
- Schaller JP, Saif LJ, Cordle CT, et al. Prevention of human rotavirus-induced diarrhea in gnotobiotic piglets using bovine antibody. J Infect Dis. 1992 Apr;165(4):623-30. [PMID:
- 17. Lotze MT. Measuring Immunity: Basic Science and Clinical Practice. London, UK: Academic Press; 2004:160.
- 18. Davison G. Bovine colostrum and immune function after exercise. Med Sport Sci. 2012;59:62-9. doi: 10.1159/000341966. [PMID: 23075556]
- 19. Greenberg PD, Cello JP. Treatment of severe diarrhea caused by Cryptosporidiumparvum with oral bovine immunoglobulin concentrate in patients with AIDS. J Acquir Immune Defic Syndr Hum Retrovirol. 1996 Dec 1;13(4):348-54. [PMID: 8948373]
- 20. Kelly GS. Bovine colostrums: a review of clinical uses. Altern Med Rev. 2003 Nov;8(4):378-94. Review. [PMID: 14653766]
- Antonio J, Sanders MS, Van Gammeren D. The effects of bovine colostrum supplementation on body composition and exercise performance in active men and women. Nutrition, 2001 Mar:17(3):243-7. [PMID: 11312068]
- 22. Shing CM, Hunter DC, Stevenson LM. Bovine colostrum supplementation and exercise performance: potential mechanisms. Sports Med. 2009;39(12):1033-54. [PMID: 19902984]
- 23. Brassica®. What is SGS? http://sgs-broccoli.com/what-is-sgs/. Accessed April 21, 2014.
- 24. Boddupalli S, Mein JR, Lakkanna S, et al. Induction of phase 2 antioxidant enzymes by broccoli sulforaphane: perspectives in maintaining the antioxidant activity of vitamins A, C, and E. Front Genet. 2012;3:7. [PMID: 22303412]
- Sulforaphane glucosinolate. Monograph. Altern Med Rev. 2010 Dec;15(4):352-60. Review. [PMID: 21194251]
- Fahey JW, Talalay P. Antioxidant functions of sulforaphane: a potent inducer of Phase II detoxification enzymes. Food Chem Toxicol. 1999 Sep-Oct;37(9-10):973-79. [PMID:
- 27. Larch arabinogalactan. Altern Med Rev. 2000 Oct;5(5):463-66. [PMID: 11056416]
- 28. Kelly GS. Larch arabinogalactan; clinical relevance of a novel immune-enhancing polysaccharide. Altern Med Rev. 1999 Apr;4(2):96-103. Review. [PMID: 10231609]

Additional references available upon request