

14 Day Detox Plan



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Clinical Applications

- Supports Natural Detoxification Mechanisms*
- Supports Gastrointestinal Health*
- Supports a Balanced Cytokine Profile*
- Lactose-Free Vegan Protein*

*14 Day Detox Plan is a comprehensive, fructose-free, low-allergy-potential dietary supplement designed to support gastrointestinal (GI) function and balanced detoxification. It features Vegan Protein Blend, Dr. Meghna Thacker, PLLC's proprietary amino acid and pea/rice protein blend; Aminogen®, to facilitate protein absorption; phytonutrients; mineral amino acid chelates; and activated B vitamins, including Quatrefolic®† and methylcobalamin. In conjunction with a modified elimination diet, 14 Day Detox Plan addresses GI and hepatic function as well as eicosanoid balance and cytokine metabolism. This formula is suitable for vegans.**

All Dr. Meghna Thacker, PLLC Formulas Meet or Exceed cGMP Quality Standards

Discussion

14 Day Detox Plan contains macro- and micronutrients, as well as a host of ingredients (some patented or proprietary) that support fatty acid metabolism, gastrointestinal health, and healthy eicosanoid and cytokine metabolism. Activated cofactors support mitochondrial energy production needed for biotransformation and detoxification. This formula's ingredients help moderate phase I detoxification, upregulate and support phase II pathways, and provide antioxidant support as well.*

Protein Metabolism

Vegan Protein Blend is Dr. Meghna Thacker, PLLC's proprietary blend of pea protein isolate and rice protein concentrate, L-glutamine, glycine, and taurine. Generation of glutathione and sulfation cofactors—vital for phase II conjugation—requires an array of amino acids. The combination of pea protein and rice protein, containing a complement of amino acids, achieves an amino acid score of 100%. Glutamine, a conditionally essential and versatile amino acid with two nitrogen moieties, is crucial to nitrogen metabolism and helps maintain healthy liver tissue and function.^[1,2] The amino acid glycine is needed for bile synthesis, phase II detoxification, and glutathione production. Taurine, a derivative of the sulfur-containing amino acid cysteine, is also important for synthesis of bile salts and helps stabilize cell membranes.*

Gastrointestinal Support

Ginger root, included to support healthy digestion including the release of bile from the gallbladder, acts at several sites to moderate PGE(2) production and support the normal response to inflammation.^[3] Fiber (from inulin and flaxseeds) supports production of short-chain fatty acids as well as a healthy intestinal flora. **MeadowPure™**, an organic flaxseed complex, possesses excellent oxidative stability, supports antioxidant activity, and provides lignins, soluble fiber, and omega-3 and omega-6 essential fatty acids.^[4] **Glutamine** plays a key role in healthy intestinal cell proliferation and gut barrier integrity, immune function, and normal tissue healing.^{*[1,2]}

Detoxification Support

Ellagic acid (from pomegranate extract) prevents over-induction of CYP1A enzymes, works at the gene level to induce synthesis of glutathione-S-transferases and other phase II activities, binds directly to toxins, and protects DNA and hepatocytes.^[5,6] **Watercress** is a rich source of beta-phenylethyl isothiocyanate (PEITC)—a versatile compound found to inhibit phase I enzymes and induce the phase II enzymes associated with biotransformation and excretion of toxins. Watercress was found to contain even stronger phase II inducers known as 7-methylsulfinylheptyl and 8-methylsulfinyloctyl isothiocyanates as well.^[7,8] **Green tea catechins** not only support antioxidant activity but also appear to act as modulators of phase I and phase II detoxification.^[9] **Choline** is present to support lipid metabolism in the liver and can be converted to betaine, a methyl donor.^{*[10]}

The active, bioavailable form of **B vitamins** (pyridoxal-5'-phosphate (B6), 5-methyltetrahydrofolate (folate), methylcobalamin (B12)) and glycine all support amino acid conjugation and are vital for the detoxification of xenobiotics and xenoestrogens. 5-methyltetrahydrofolate (5-MTHF), methylcobalamin, betaine, and **methylsulfonylmethane** (MSM) are present to support methylation and detoxification. 5-MTHF supports healthy folate nutrition, especially in those with variations in folate metabolism. In 14 Day Detox Plan, 5-MTHF is provided as Quatrefolic® for enhanced stability, solubility, and bioavailability.^{*[11]}

Preventium®, a patented form of potassium hydrogen d-glucarate, supports glucuronidation. Sulfation is supported by **MSM** and **sodium sulfate**. Acetylation is supported by **d-calcium pantothenate**, pyridoxal-5'-phosphate, and magnesium. Several minerals in 14 Day Detox Plan are provided as Albion® mineral chelates and TRAACS® mineral amino acid chelates for enhanced gastrointestinal absorption and bioavailability.^{*[12]}

Antioxidant Support and Cytokine Balance

Bioflavonoids, quercetin, rutin, and curcumin support antioxidant activity, counter free radicals, and support healthy eicosanoid and cytokine metabolism.^[13,14] Curcumin has a long history of use for its support of a normal, healthy response to inflammation.^[15] **N-acetyl-cysteine (NAC)** stimulates glutathione synthesis, enhances glutathione-S-transferase activity, and promotes detoxification.^[16] **Selenium glycinate** provides support for glutathione metabolism and antioxidant protection.*

14 Day Detox Plan provides an array of nutrients that supports gastrointestinal health; detoxification and antioxidant mechanisms; and a normal, healthy response to inflammation and cytokine balance. This formula is designed to be used as part of a step-approach cleanse in conjunction with a modified

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Cream Chocolate

Supplement Facts

Serving Size: 2 Scoops (about 62 g)
Servings Per Container: About 14

	Amount Per Serving	%DV		Amount Per Serving	%DV
Calories	230		Molybdenum (as TRAAACS [®] molybdenum glycinate chelate)	35 mcg	78%
Total Fat	8 g	10%	Sodium (from ingredients with naturally occurring sodium, sodium sulfate anhydrous, and sodium ascorbate)	580 mg	25%
Saturated Fat	2 g	10%	Potassium (from tripotassium citrate and ingredients with naturally occurring potassium)	505 mg	11%
Total Carbohydrate	18 g	7%	Stabilized Flaxseed	5.6 g	**
Dietary Fiber	6 g	21%	Typical Alpha-Linolenic Acid Content	1.28 g	**
Total Sugars	5 g	**	Typical Linoleic Acid Content	392 mg	**
Includes 5g Added Sugars		10%	Pomegranate Extract (<i>Punica granatum</i>)(hull)(40% ellagic acid)	400 mg	**
Protein	26 g		Betaine Anhydrous (trimethylglycine)	250 mg	**
Vitamin A (as natural beta-carotene)	750 mcg	83%	Lemon Bioflavonoid Complex (<i>Citrus x limon</i>) (fruit peel)(25% bioflavonoids)	250 mg	**
Vitamin C (as sodium ascorbate)	250 mg	278%	Quercetin (as quercetin dihydrate from <i>Dimorphandra mollis</i>)(pod)	250 mg	**
Thiamin (as thiamine HCl)	15 mg	1250%	Preventium [®] (potassium d-glucarate)	250 mg	**
Riboflavin (as riboflavin 5'-phosphate sodium)	5 mg	385%	Rutin (from <i>Sophora japonica</i>)(bud)	200 mg	**
Niacin (as niacinamide and niacin)	40 mg	250%	BCM-95 [®] Turmeric Extract (<i>Curcuma longa</i>)(rhizome)(95% total curcuminoids complex, including curcumin, curcuminoids, and volatile oils)(86% curcuminoids)(65% curcumin)	200 mg	**
Vitamin B6 (as pyridoxal 5'-phosphate)	5 mg	294%	N-Acetyl-L-Cysteine	150 mg	**
Folate (as Quatrefolic [®] (6S)-5-methyltetrahydrofolic acid, glucosamine salt)	200 mcg DFE	50%	Ginger (<i>Zingiber officinale</i>)(rhizome)	150 mg	**
Vitamin B12 (as methylcobalamin)	50 mcg	2083%	Methylsulfonylmethane (MSM)	120 mg	**
Biotin	150 mcg	500%	Sodium Sulfate Anhydrous	100 mg	**
Pantothenic Acid (as d-calcium pantothenate)	35 mg	700%	Watercress (<i>Nasturtium officinale</i>)(aerial parts)	100 mg	**
Choline (as choline bitartrate)	100 mg	18%	Green Tea Aqueous Extract (<i>Camellia sinensis</i>)(leaf) (80% polyphenols, 60% catechins, 30% EGCG, 6% caffeine)	82 mg	**
Calcium (as DimaCal [®] di-calcium malate and ingredients with naturally occurring calcium)	220 mg	17%			
Iron (naturally occurring)	6 mg	33%			
Iodine (as potassium iodide)	60 mcg	40%			
Magnesium (as Albion [®] di-magnesium malate)	140 mg	33%			
Zinc (as TRAAACS [®] zinc bisglycinate chelate)	10 mg	91%			
Selenium (as Albion [®] selenium glycinate complex)	100 mcg	182%			
Manganese (as TRAAACS [®] manganese bisglycinate chelate)	2 mg	87%			
Chromium (as TRAAACS [®] chromium nicotinate glycinate chelate)	60 mcg	171%			

Other Ingredients: Vegan Protein Blend (Dr. Meghna Thacker, PLLC's proprietary blend of pea protein isolate, taurine, glycine, rice protein concentrate, and L-glutamine), dried cane syrup, cocoa powder, natural flavors (no MSG), sunflower oil, medium-chain triglyceride oil, cellulose gum, xanthan gum, Aminogen[®] fungal proteases, stevia leaf extract, guar gum, and silica.

AMINOGEN[®] is a registered trademark of Innophos Nutrition, Inc. AMINOGEN[®] is protected under U.S. patent 5,387,422.



Albion, DimaCal, TRAAACS and the Albion Medallion design are registered trademarks of Albion Laboratories, Inc. Malates covered by US patent 6,706,904.

Quatrefolic[®] is a registered trademark of Gnosis S.p.A. Produced under US Patent 7,947,662.

BCM-95[®] is a registered trademark of DoiCas Biotech, Ltd. Protected under US patents 7,883,728; 7,736,679; and 7,879,373.

Preventium[®] is a registered trademark of Applied Food Sciences, LLC. (US patents 4,845,123, 5,364,644, 5,561,160).

Directions

Blend, shake, or briskly stir 2 level scoops (62 g) into 10-12 ounces chilled, pure water (or mix amount for desired thickness) and consume once daily, or use as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

Does Not Contain

Wheat, gluten, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

Typical Amino Acid Profile Per Serving:

Alanine	1,280 mg	Methionine	330 mg
Arginine	2,580 mg	Phenylalanine	1,630 mg
Aspartic Acid	3,400 mg	Proline	1,340 mg
Cysteine	300 mg	Serine	1,570 mg
Glutamic Acid	4,990 mg	Threonine	1,160 mg
Glycine	1,720 mg	Taurine	500 mg
Histidine	740 mg	Tryptophan	300 mg
Isoleucine	1,330 mg	Tyrosine	1,130 mg
Leucine	2,490 mg	Valine	1,490 mg
Lysine	2,120 mg		

References

- Smith RJ, Wilmore DW. Glutamine nutrition and requirements. *JPEN J Parenter Enteral Nutr.* 1990 Jul-Aug;14(4 Suppl):94S-99S. Review. [PMID: 2119461]
- Lacey JM, Wilmore DW. Is glutamine a conditionally essential amino acid? *Nutr Rev.* 1990 Aug;48(8):297-309. Review. [PMID: 2080048]
- Lantz RC, Chen GJ, Sarihan M, et al. The effect of extracts from ginger rhizome on inflammatory mediator production. *Phytomedicine.* 2007 Feb;14(2-3):123-28. [PMID: 16709450]
- Adolph JL, Whiting SJ, Juurlink BH, Thorpe LU, Alcorn J. Health effects with consumption of the flax lignan secoisolariciresinol diglucoside. *Br J Nutr.* 2010 Apr;103(7):929-38. Review. [PMID: 20003621]
- Barch DH, Rundhaugen LM, Stoner GD, et al. Structure-function relationships of the dietary anticarcinogen ellagic acid. *Carcinogenesis.* 1996 Feb;17(2):265-9. [PMID: 8625448]
- Girish C, Koner BC, Jayanthi S, et al. Hepatoprotective activity of picroliv, curcumin and ellagic acid compared to silymarin on paracetamol induced liver toxicity in mice. *Fundam Clin Pharmacol.* 2009 Dec;23(6):735-45. [PMID: 19656205]
- Rose P, Faulkner K, Williamson G, et al. 7-Methylsulfinylheptyl and 8-methylsulfinylheptyl isothiocyanates from watercress are potent inducers of phase II enzymes. *Carcinogenesis.* 2000 Nov;21(11):1983-8. [PMID: 11062158]
- Hofmann T, Kuhnert A, Schubert A, et al. Modulation of detoxification enzymes by watercress: in vitro and in vivo investigations in human peripheral blood cells. *Eur J Nutr.* 2009 Dec;48(8):483-91. [PMID: 19636603]
- Akhlaghi M, Bandy B. Dietary green tea extract increases phase 2 enzyme activities in protecting against myocardial ischemia-reperfusion. *Nutr Res.* 2010 Jan;30(1):32-39. [PMID: 20116658]
- Linus Pauling Institute. <http://lpi.oregonstate.edu/infocenter/othernuts/choline/>. Accessed May 8, 2012.
- Quatrefolic. <http://www.quatrefolic.com/>. Accessed May 8, 2012.
- Albion. <http://www.albionminerals.com/>. Accessed May 8, 2012.
- Garg R, Gupta S, Maru GB. Dietary curcumin modulates transcriptional regulators of phase I and phase II enzymes in benzo[a]pyrene-treated mice: mechanism of its anti-initiating action. *Carcinogenesis.* 2008 May;29(5):1022-32. [PMID: 18321868]
- Amália PM, Possa MN, Augusto MC, et al. Quercetin prevents oxidative stress in cirrhotic rats. *Dig Dis Sci.* 2007 Oct;52(10):2616-21. [PMID: 17431769]
- Jurenka JS. Anti-inflammatory properties of curcumin, a major constituent of *Curcuma longa*: a review of preclinical and clinical research. *Altern Med Rev.* 2009 Jun;14(2):141-53. Review. Erratum in: *Altern Med Rev.* 2009 Sep;14(3):277. [PMID: 19594223]
- Kelly GS. Clinical applications of N-acetylcysteine. *Altern Med Rev.* 1998 Apr;3(2):114-27. Review. [PMID: 9577247]

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