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*These statements have not been evaluated by the Food and Drug Administration.

MetabolX

Serving Size 42.8g (2 level scoops)
Servings Per Container 14

	Amount Per Serving
Calories	140
Calories from fat	25 g
Total Fat	2.5 g
Saturated Fat	0 g
Total Carbohydrate	13 g
Dietary Fiber	7 g
Sugars	2 g
Protein	14 g

VITAMINS

Vitamin A (Betatene mixed carotenoids, Beta Carotene, and Vitamin A Palmitate)	3000 IU
Vitamin C (Ascorbic Acid)	500 mg
Vitamin D (Cholecalciferol)	200 IU
Vitamin E (d-Alpha Tocopherol Acetate)	100 IU
Vitamin B1 (Thiamin Mononitrate)	50 mg
Vitamin B2 (Riboflavin)	0.9 mg
Niacin (Niacinimide)	10 mg
Vitamin B6 (90% Pyridoxal 5' Phosphate, 10% Pyridoxine Hydrochloride)	21 mg
Folate (Folic Acid)	200 mcg
Vitamin B12 (Cyanocobalamin)	200 mcg
Biotin	6000 mcg
Pantothenic Acid (d-Calcium Pantothenate)	5 mg

MINERALS

Calcium (Calcium Glycinate)	350 mg
Phosphorus (Potassium Phosphate)	360 mg
Iodine (Potassium Iodide)	75 mcg
Magnesium (Magnesium Glycinate)	330 mg
Zinc (Zinc Citrate)	15 mg
Selenium (Selenomethionine)	100 mcg
Copper (Copper Gluconate)	1 mg
Manganese (Manganese Gluconate)	2.5 mg
Chromium (Chromium Nicotinate)	300 mg
Molybdenum (Sodium Molybdate)	37.5 mcg
Sodium (Sodium Sulfate)	80 mg
Potassium (Potassium Phosphate)	680 mg
Vanadium (Vanadyl Sulfate)	500 mcg
Branched Chain Amino Acids	
L-Leucine	225 mg
L-Isoleucine	100 mg
L-Valine	175 mg

SPECIALTY NUTRIENTS

Glycine	1000 mg
L-Carnitine (L-Carnitine Tartrate)	100 mg
Coenzyme Q-10	10 mg
L-Glutamine	500 mg
L-Tyrosine	500 mg
Choline (Choline Dihydrogen Citrate)	50 mg
Inositol	30 mg

METABOLX

NUTRITIONAL SUPPORT FOR CELLULAR ENERGY METABOLISM AND HEALTHY BLOOD SUGAR CONTROL

- Promotion of healthy blood sugar balance
- Insulin level regulation and enhanced receptor function
- Nutritional support for energy metabolism and the reduction of fatigue
- Adaptogenic support to help cope with stress and maintain cortisol balance

Metabol-X is a complete functional food product designed to help provide comprehensive nutritional support for efficient cellular energy metabolism, healthy blood sugar control, and optimal insulin performance. It contains a macronutrient profile that has a favorable protein to carbohydrate ratio to serve as a glycemic-friendly meal or snack, a full multivitamin and mineral core, and a blend of specialty nutrients to help with glycemic control and energy production.

CLINICAL OBJECTIVES OF METABOL-X:

MACRONUTRIENT BALANCING: A favorable protein to carbohydrate ratio is maintained to promote consistent glucose and insulin control, favorable eicosanoid balance, and reduced inflammation. High fiber content is present in order to slow glucose absorption, improve the lipid profile, and optimize colonic function. (Protein 14 gm [rice], Net Carbohydrates 6 gm, Fiber 7 gm, Fat 2.5 gm)

FULL MULTIVITAMIN & MINERAL: A full spectrum of vitamins and minerals are provided to aid in the metabolism of macronutrients and to support the enzyme and receptor functions critical to maintaining proper glycemic control and energy production.

GLUCOSE & INSULIN CONTROL: In addition to the favorable protein to carbohydrate ratio in Metabol-X, a host of micronutrients and herbs have been included to help balance blood sugar and increase insulin sensitivity, such as chromium, vanadium, magnesium, fennugreek, alpha-lipoic acid, fiber, and a full spectrum of B-vitamins.

ADRENAL SUPPORT & CORTISOL BALANCE: Herbal adaptogens and key nutrients have

been included in order to help the body's adaptation to stress and to support



	Amount Per Serving
Alpha Lipoic Acid	25 mg
Gamma Oryzanol	100 mg
Malic Acid	600 mg
NADH	5 mg
Grape Seed Extract (95% Proanthocyanidins)	10 mg
Fenugreek Seed Extract (4:1)	100 mg
American Ginseng Root Extract (5% Ginsenosides)	60 mg
Ginkgo Biloba Leaf Extract (24% Ginkgo Flavone Glycosides)	20 mg
5-Hydroxytryptophan (5-HTP)	25 mg
Lecithin Powder (23% Phosphatidylcholine, 20% Phosphatidylethanolamine, 14% Phosphatidylinositol)	2530 mg

METABOLX

in addition to causing the depletion of a host of micronutrients. Increased cortisol has negative effects over serum blood glucose control and, therefore, insulin levels. Metabol-X contains American ginseng, L-tyrosine, and vitamins C, B5, and B6 in order to promote proper homeostasis of serum cortisol, aid in the production and replenishment of depleted catecholamines, support adrenal cortical health, and replete common nutritional deficiencies that can result from chronic stress. Branched chain amino acids, such as leucine, isoleucine, and valine have been demonstrated to increase protein synthesis, improve body composition, and reduce the catabolic effects of chronic stress. Gamma-oryzanol, as a source of ferulic acid, has been shown to have ergogenic effects, improve body composition, and promote healthy hypothalamic-pituitary function and catecholamine balance.

THYROID SUPPORT: L-tyrosine, iodine, selenium, and beta-carotene have been included in Metabol-X in order to promote proper thyroid hormone production, efficient thyroid hormone conversion, and optimal peripheral hormone receptor function in order to improve overall metabolism and reduce fatigue.

ENERGY SUPPORT & FATIGUE REDUCTION: Critical energy metabolic pathways, such as glycolysis, Krebs's cycle, and the electron transport chain, are supported by providing the necessary nutrients such as magnesium, malic acid, NADH, Co-Q10, L-carnitine, and inositol. This support of the efficient burning of carbohydrates, proteins, and fats may promote optimal ATP production, resulting in less fatigue and increased vitality. Gamma-oryzanol may reduce post-exercise fatigue and improve exercise tolerance. The presence of iron, copper, folic acid, vitamin B6 and vitamin B12 promotes proper red blood cell production and can protect against anemia, a common reason for a lack of energy and complaints of fatigue.

DETOXIFICATION: Proper hepatic function results in the optimal removal of toxins from the body, which may result in the reduction of total oxidative stress, more efficient mitochondrial function, increased energy and vitality, and the improvement of a myriad of vague symptoms experienced by those with increased total toxic burdens. Sodium sulfate, molybdenum, various antioxidants, and a full spectrum of B-vitamins are included to support proper phase I and phase II pathways of hepatic detoxification.

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METABOLX

INTESTINAL SUPPORT: Poor intestinal health can lead to increased mucosal permeability and an elevated toxic and antigenic load. New literature is suggesting that up-regulation of the innate immune system, and the resulting increase in inflammatory mediators, can contribute significantly to disorders such as metabolic syndrome and cardiovascular disease. Nutrients such as L-glutamine, vitamin C, pantothenic acid, and zinc, help promote a healthy intestinal lining, reducing toxicity, oxidative stress, and allergenicity.

ANTIOXIDANT SUPPORT: Grape seed extract, ginkgo, beta-carotene, mixed carotenoids, vitamins C and E, zinc, selenium, gamma-oryzanol, and others, are provided for protection against the free radical damage that is a prominent feature of poor blood sugar and insulin control. Ginkgo also has the added benefit of a mild anti-coagulant effect and the promotion of increased cerebral oxygenation.

NEUROLOGICAL SUPPORT: Peripheral neuropathy and CNS degeneration are common complications of poor blood sugar and insulin control. The inclusion of neuro-protective substances, such as: vitamins B1, B2, B6, and B12, choline, inositol, and the branched chain amino acids leucine, isoleucine, and valine, may provide protection against this devastating neuro-degeneration. 5-HTP is also included for neurotransmitter support.