

Workout Boost



Clinical Applications

- Enhances Exercise Performance*
- Helps Reduce Muscle Fatigue and Supports Muscle Power, Strength, and Growth with Peak ATP*
- Supports Recovery*
- Supports ATP Biosynthesis and Muscular Excitability*
- Provides an Alternative to Ordinary Caffeine*
- Supports Electrolyte Replacement*
- Provides Antioxidant Support with S-Acetyl-L-Glutathione and Vitamin C*

*Workout Boost is designed to meet the demanding needs of the body during and after exercise. This great-tasting drink mix provides a low-carb, zero-sugar combination of bioactive B vitamins, electrolytes, Albion TRAACS® chelated trace minerals, key amino acids, herbs, and powerful antioxidants without the use of synthetic sweeteners or artificial ingredients. To fuel muscular excitability and take performance and recovery to the next level, Workout Boost features a unique blend of natural exercise enhancers. These include caffeine/pterostilbene co-crystal, creatine monohydrate, and Peak ATP® adenosine triphosphate. Let Workout Boost help you maximize your exercise time and your energy output.**

All Vitality MDs Formulas Meet or Exceed cGMP Quality Standards

Discussion

All-Natural, No Sugars

Workout Boost relies on natural ingredients, not ephedra or artificial stimulants, to help maximize exercise performance. Furthermore, it provides only five grams of carbohydrates and zero sugars. By using natural flavors and stevia in place of sugar and other carbohydrates, the typical “sugar high” that is associated with many energy drinks can be avoided. Equally important, Workout Boost contains no artificial colors.*

Peak ATP®

Oral supplementation of ATP (adenosine triphosphate) combined with resistance training has demonstrated ergogenic benefits.^[1] Peak ATP is a patented form of ATP disodium that has been shown in human studies to enhance muscular growth, power, and strength while improving recovery. Proposed mechanisms of action include increased muscular excitability, improved blood flow, and increased anabolic signaling.^[1-4] As a result of these effects, Peak ATP helps athletes push themselves to greater levels of performance.*

Peak ATP supplementation (400 mg/d) has been shown to increase post-exercise ATP levels and athletic performance following repeated sprint bouts. Peak ATP also significantly increased vasodilation and blood flow after acute arm exercise bouts.^[5,6] In a double-blind, placebo-controlled, crossover study, 400 mg of Peak ATP for 15 days “tended to reduce muscle fatigue while improving muscle low-peak torque through sets of exhaustive exercise.”^[1] A double-blind placebo-controlled study showed that resistance-trained participants taking Peak ATP for 12 weeks experienced several benefits over placebo, such as increased strength (147%), increased power (30%), increased lean body mass (100%), and increased muscle thickness (96%). Additionally, body fat decreased in the supplemented group.^[3] Data also suggests that Peak ATP helped prevent performance declines seen in overreaching.^[3] Adding to these findings, in a randomized, double-blind, placebo-controlled study (n=42), Purpura et al found that 400 mg of Peak ATP for two weeks prevented exercise-induced declines in ATP and its metabolites and enhanced peak power and muscle excitability.*^[7]

Creatine Monohydrate

Creatine supplementation increases the amount of creatine in muscle tissue, heightens energy production, decreases muscle fatigue, and reduces lactic acid output. Significant improvements in body mass, fat-free body mass, oxygen uptake, sprint performance, weightlifting volumes, and overall exercise performance following creatine supplementation have been demonstrated.^[8-10] In Workout Boost, a compounding effect of several ingredients is expected. In fact, the combinatory effects of caffeine, creatine, and amino acids have produced improvements in time to exhaustion (TTE) and peak velocity (PV) in humans.*^[11]

Caffeine Pterostilbene Co-Crystal

Caffeine pterostilbene co-crystal is an innovative ingredient that combines caffeine with pterostilbene—a highly bioavailable analog of resveratrol—to form a unique co-crystal structure. It appears that this unique structure affects the way the body utilizes caffeine. As such, it may offer significant advantages over caffeine alone. In a rat study (n=6), the half-life of caffeine from caffeine pterostilbene co-crystal was eight hours, while that of ordinary caffeine was just three hours.^[12] In a preliminary, four-week, single-blind, crossover human study (n=12) that compared 232 mg of caffeine pterostilbene co-crystal (providing 99.76 mg of caffeine) to 100 mg of ordinary caffeine, the absorption of caffeine from caffeine pterostilbene co-crystal was approximately 30% slower and caffeine pterostilbene co-crystal delivered 30% more caffeine to the bloodstream. Furthermore, at six hours, 51% more caffeine from caffeine pterostilbene co-crystal was detected in serum compared to ordinary caffeine.*^[13,14]

These data suggest that the effects of caffeine from caffeine pterostilbene co-crystal may last longer than the effects from ordinary caffeine and point to a potential for reducing total caffeine intake. Additionally, the extended half-life and slower absorption rate of caffeine from caffeine pterostilbene co-crystal may produce a more moderated and gradual finish, thereby preventing the “crash” associated with regular caffeinated energy products. While the results of these studies are promising, larger studies are needed to validate the findings and determine if these findings translate into a lengthened energy effect. Of interest, chlorogenic acids from coffee have been found to positively affect human fecal microbiota, including *Bifidobacterium* species, which could benefit host health.*^[15]

Herbs and Amino Acids

Workout Boost combines caffeine pterostilbene co-crystal in a proprietary blend with various herbs and amino acids, including green tea extract, coffee fruit extract, taurine, and L-arginine alpha-ketoglutarate. This proprietary blend is designed to complement the activities of caffeine pterostilbene co-crystal. Furthermore, some of these individual ingredients taken in high doses have roles in mitochondrial biogenesis and are known to have a positive influence on exercise performance.*^[16-18]

Continued on next page

***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.**

Supplement Facts

Serving Size: 1 Stick Pack (about 8.8 g)
Servings Per Container: 30

	Amount Per Serving	%Daily Value
Calories	20	
Total Carbohydrate	5 g	2%†
Vitamin C (as sodium ascorbate, potassium ascorbate, calcium ascorbate, and zinc ascorbate)	500 mg	556%
Vitamin E (as d-alpha tocopheryl succinate)	10 mg	67%
Thiamin (as thiamine HCl)	0.45 mg	38%
Riboflavin (as riboflavin 5'-phosphate sodium)	0.5 mg	38%
Niacin	10 mg	63%
Vitamin B6 (as pyridoxal 5'-phosphate)	2.6 mg	153%
Folate (as (6S)-5-methyltetrahydrofolic acid, glucosamine salt ^(S2))	68 mcg DFE	17%
Vitamin B12 (as methylcobalamin)	2,500 mcg	104,167%
Pantothenic Acid (as d-calcium pantothenate)	3 mg	60%
Magnesium (as di-magnesium malate ^(S1))	150 mg	36%
Zinc (as zinc bisglycinate chelate ^(S1))	3 mg	27%
Manganese (as manganese bisglycinate chelate ^(S1))	0.5 mg	22%
Chromium (as chromium nicotinate glycinate chelate ^(S1))	100 mcg	286%
Sodium (as sodium bicarbonate and sodium ascorbate)	100 mg	4%
Potassium (as potassium bicarbonate and potassium ascorbate)	200 mg	4%
Proprietary Blend	465 mg	**
Caffeine pterostilbene cocrystal, whole coffee fruit (<i>Coffea arabica</i>) (whole fruit) (40% chlorogenic acid), taurine, L-arginine alpha-ketoglutarate, organic green tea aqueous extract (<i>Camellia sinensis</i>) (leaf) (25% polyphenols, 15% catechins, <10% caffeine), s-acetyl-L-glutathione, and acetyl-L-carnitine (as acetyl-L-carnitine HCl), yielding a total of 95 mg of caffeine.		

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

Other Ingredients: Maltodextrin, citric acid, malic acid, natural grape powder, natural flavors (no MSG), stevia leaf extract, and silica.

S1. Albion and TRAACS are registered trademarks of Albion Laboratories, Inc.



S2. Quatrefolic® is a registered trademark of Gnosis

Electrolytes and Antioxidants

Electrolytes—including sodium, potassium, and magnesium—are important for energy production, nerve transmission, muscle contractions, pH balance, fluid balance, and more. Conditions that promote excessive sweating and increased metabolic activity can require replacement of these important minerals and increase the need for antioxidants. Workout Boost provides 130 mg of sodium, 280 mg of potassium, and 150 mg of magnesium in each serving. To support protection from free radicals, Workout Boost provides 500 mg of vitamin C in the form of four mineral ascorbates, as well as natural vitamin E, selenium, green tea extract, and s-acetyl-L-glutathione (SAG). SAG is an orally stable glutathione that has been shown to cross the membrane of the mitochondria, which increases the organelle's activity and helps minimize reactive oxygen species.*

B Vitamins

The B vitamins provided in Workout Boost are in their activated forms to optimize bioavailability and utilization. As essential parts of coenzymes, these water-soluble nutrients are integral to the complex biochemical processes that convert food to glucose and ATP—the energy used by cells. Vitamin B12 also works closely with folate to help make red blood cells and facilitate the work of iron in the body. Iron helps carry oxygen to all cells, including muscle cells, for use in the generation of energy.*

Directions

Dissolve the contents of one scoop in 6-12 oz of water according to preferred sweetness. On non-workout days, consume the effervescent drink in the AM on an empty stomach. On workout days, consume the effervescent drink once daily 30 minutes prior to workout, or use as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication, especially blood thinners, should discuss potential interactions with their healthcare professional. Caffeine should not be combined with synephrine or ephedrine. Use cautiously if you have a history of abnormal heart rhythm. Do not use if tamper seal is damaged.

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Formulated To Exclude

Wheat, gluten, yeast, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, artificial colors, artificial sweeteners, and artificial preservatives.

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