PRE-PLAY

PEAK PERFORMANCE & PREVENTION

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*

Pre-Play 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, Pre-Play features a unique blend of natural exercise enhancers that are patented and clinically tested. These include caffeine/pterostilbene co-crystal, Creapure® creatine, and Peak ATP® adenosine triphosphate. Let Pre-Play help you maximize your exercise time and your energy output.*

All Peak Performance & Prevention Formulas Meet or Exceed cGMP Quality Standards

Discussion

All-Natural, No Sugars

Pre-Play 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, Pre-Play 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]

Creapure® 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. In Pre-Play, 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]

Creapure is premium, 100% pure creatine monohydrate that has been used with confidence for over 20 years. The Creapure brand is recognized for careful selection of raw materials, patented high-performance technology, sophisticated process engineering under GMP conditions, and precise chemical analysis to ensure consistency and purity.

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.*^{1[5]}

Herbs and Amino Acids

Pre-Play combines caffeine pterostilbene co-crystal in a proprietary blend with various herbs and amino acids, including green tea extract, coffee

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*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. PRE-PLAY

Supplement Facts

l l	Amount Per Serving	%Daily Val
Calories	25	
Total Carbohydrate	5 a	2%†
/itamin C (as sodium ascorbate, potassium ascorbate, calcium ascorbate, and zinc asc		556%
/itamin E (as d-alpha tocopheryl succinate)	10 mg	67%
Thiamin (as thiamine HCI)	0.45 mg	38%
Riboflavin (as riboflavin 5'-phosphate sodium)	0.5 mg	38%
liacin	10 mg	63%
/itamin B6 (as pyridoxal 5'-phosphate)	2.6 mg	153%
olate (as Quatrefolic® (6S)-5-methyltetrahydrofolic acid, glucosamine salt)	40 mca DFE	10%
/itamin B12 (as methylcobalamin)	2500 mca	104.1679
Pantothenic Acid (as d-calcium pantothenate)	3 mg	60%
Magnesium (as Albion® di-magnesium malate)	150 mg	36%
Zinc (as TRAACS® zinc bisglycinate chelate)	3 mg	27%
Manganese (as TRAACS® manganese bisglycinate chelate)	0.5 mg	22%
Chromium (as TRAACS® chromium nicotinate glycinate chelate)	100 mcg	286%
Sodium	135 mg	6%
Potassium	310 mg	7%
Otto Otto	o to mg	1 70
Creatine (as Creapure® creatine monohydrate)	3 g	**
Proprietary Blend	465 mg	**
Caffeine pterostilbene cocrystal, whole coffee fruit (Coffea arabica)(whole fruit)	100 1119	
(40% chlorogenic acid), taurine, L-arginine alpha-ketoglutarate, organic green tea aqu	eous extract	
(Camellia sinensis)(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.		
PEAK ATP® Adenosine 5' Triphosphate Disodium	400 mg	**

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

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



PEAK ATP® is a registered trademark of TSI, Inc. and is used under license.

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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]

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. Pre-Play provides 130 mg of sodium, 280 mg of potassium, and 150 mg of magnesium in each serving. To support protection from free radicals, Pre-Play 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-Lglutathione (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 Pre-Play are in their activated forms to optimize bioavailability and utilization. As essential parts of coenzymes, these watersoluble 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 practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication, especially blood thinners, should discuss potential interactions with their healthcare practitioner. 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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Does Not Contain

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

> *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.

> > DISTRIBUTED BY: **Peak Performance & Prevention** 317 4th ST NW Puyallup, WA 98371 425-441-3330