



PUSH is designed to energize the athlete just before and during an intense /rigorous exercise periods of approximately 30 minutes and to increase exercise performance.

This process involves the combination of agents to maximize:

1.) Motivation:

• **Beta Alanine:** We all understand that beta alanine, when given daily, will be converted into carnosine and stored in muscle. Carnosine in muscle acts as a buffer against acidification. When muscles acidify they contract poorly and this can lead to bonking! THIS IS NOT WHY WE ADD BETA ALANINE TO PUSH. If used daily, the “carnosine” effect will start to work in 20-30 days. Beta Alanine has a motivating component, often felt as a tingling and enhanced alertness; further beta alanine improves anaerobic exhaustion threshold and prolongs time to exhaustion. We add 2 grams of beta alanine, a higher than normal strength, to increase the motivational aspect.

• **Quercetin:** The yellow specks in the PUSH Product are Quercetin. It is a very effective, all natural anti-oxidant. It is an energy activator. It improves mitochondrial function. The more effective the mitochondria, the more energy a muscle can generate and utilize. It produces caffeine-like boost to the CNS.

• **Caffeine:** Generally regarded as the stimulant in coffee and teas. It inhibits an enzyme that regulates most biochemical process. When inhibited, our bodies are turned on and stimulated. We add 135 mg of caffeine to our product (the equivalent of a strong 8 oz. cup of coffee.). Caffeine boosts alertness & mood. It is not a dehydrator at this strength (stimulates the digestive tract to empty).

• **To summarize,** from the perspective of a pre-work out product, the combination of beta alanine, quercetin and caffeine are all multi-functional stimulants working at different sites in our body to optimize our motivation to start a great work out.

2.) Energy Generation:

• While feeling motivated is key to a good workout, energy generation for the workout is equally important. Our vitamin package of B3, B6 and B12, enhances energy generation by increasing the burning of all available fuels (sugars, carbohydrates, fats and amino acids/proteins). These actions are acute/immediate effects and different from the long-term value of these vitamins that among other actions help repair over-used/damaged muscle. Our vitamins are energy vitamins: lacking these can lead to feeling fatigued and decrease in performance.

• Glycine is the second and very important component of our energy generation package. Glycine is called a glucogenic amino acid. It helps convert glycogen and glucose (sugar) into energy. Further it helps prevent the breakdown of muscle by boosting the levels of creatine. Creatine is important in sustaining energy. Further, glycine promotes growth hormone (GH) release. In combination with Arginine and vitamin B6, the effect of GH release may be greater.

3.) Blood Flow and Oxygenation:

Arginine increases blood flow throughout our body and especially to blood vessels in our hearts. This helps oxygen reach all working muscle groups (skeletal and cardiac). With increases in blood flow, toxic metabolic by products from intense exercise are re-distributed from muscles to the blood. Thus lactic acid build up in muscles will be delayed and muscles will be able to perform optimally longer.

4.) Muscle Protection

• PUSH contains 5 grams of BCAAs in a ratio of 3 grams of leucine to 1 gram of isoleucine and 1 gram of valine. This BCAA package has many function including: anabolic muscle building, prolonging endurance, decreasing fatigue and increasing the utilization of fatty acids for energy in glycogen depleted muscles. BCAAs have also been reported to increase lactate threshold.

• Anti-oxidants in the form of Vitamins C and E are also added to PUSH. Energy generation is an “oxidative process”. This means that when fuel is burned, many free radicals are generated. Free radicals damage cells and muscle groups. Vitamin E and C help prevent free radical damage and improve overall performance.

Think of this as putting a filter on the exhaust of an engine and filtering out (trapping) bi-products of fuel burning.

5.) Endurance:

• ALL the ingredients in PUSH contribute to endurance. Combined, they activate many pathways in our bodies to increase our ability to perform longer at optimal capacity. Instead of each ingredient alone, the combination leads to better absorption and boost performance.

6.) Side Note:

Push overall actively can be enhanced by adding high strength (2 tsp.) of our SFH omega 3 oil prior to a training session. Fish Oil increases blood flow and improves vasodilatation, thereby lowering BP. Fish oil helps move blood to the muscles during training while simultaneously improving insulin sensitivity and energy utilization in the muscle cell.

Supplement Facts		
Serving Size 18 grams, 30 servings per bag One scoop (18 grams)		
	AMOUNT PER SERVING	% DAILY VALUE*
Calories	16	
Sodium	130mg	4%
Potassium	56mg	2%
Total Carbohydrates	4g	1%
Sugars	1g	
Vitamin C (Ascorbic Acid)	135mg	225%
Vitamin E (dl-Alpha Tocopheryl Acetate)	400IU	100%
Vitamin B3 (Niacin)	24mg	120%
Vitamin B6 (Pyridoxine HCl)	20mg	1000%
Vitamin B12 (Cyanocobalamin)	3.6mcg	50%
Leucine	3.0g	†
Arginine	2.0g	†
Beta-Alanine	2.0g	†
Coconut water powder	1.0g	†
Glycine	1.0g	†
Isoleucine	1.0g	†
Valine	1.0g	†
Quercetin	500mg	†
Caffeine	135mg	†

* % daily values are based on 2,000 calorie diet.
† daily value not established.

Other ingredients: Natural flavoring, citric acid, cherry powder and stevia

This product may have been manufactured on the same processing line as products containing tree nuts (coconut), milk, shellfish (crab) or fish (sardines, anchovies, herring).

SUGGESTED USE: As a dietary supplement, mix one scoop of Push with 12 to 16 oz of water 20 to 30 minutes before training. Use only as directed. Store in a cool, dry place.

