



BEET PLUS™
ORGANIC NITRATE-RICH POWDER

NP Nutra's BeetPlus™ Organic Nitrate-Rich Powder is a unique high nitrate ingredient, containing 1.4 - 2.1g of standardized dietary nitrate per 100g of powder (1.4-2.1%) and produced with a patented low-temperature drying technology. This certified organic highly soluble powder with an earthy, sweet beet flavor, targets the sports nutrition market due to the benefits derived from its high dietary nitrate content. However, due to its potent antioxidant properties and high vitamin and mineral content, BeetPlus™ is for all health-conscious consumers and can be used in a wide variety of applications.

Quality Control

NP Nutra's Triple-T Verification® Program provides customers peace of mind with pure, traceable ingredients – sustainably sourced from farmers and of the highest quality. BeetPlus™ Organic Nitrate-Rich Powder is processed in an SQF certified facility using beets specifically grown for their high nitrate content, carefully selected, cultivated and processed under a strict quality control system and checked by internal and third- party laboratories.

Drying Method: Energy* Efficient, Patented Drying Technology

The beets are washed without solvents, then the beetroot juice is dried using a patented drying technology in which gentle energy targets and evaporates water molecules with relatively low-temperature inputs, leaving the nutrient compounds of the raw material intact. Unlike other drying methods that damage nutrient compounds with high heat or vacuum pressure, this method produces solid encased particles uniform in shape and crystalline in structure. The resultant low surface tension increases the solubility and flowability of the powder and the particle's encased shell protects it from oxygen and moisture, resulting in a longer shelf life.

This drying method produces a powder with maximum nutrition, flavor, aroma and color and is energy efficient (73-88%), using 100% renewable and clean energy.

Health Functions

- Antioxidant
- Anti-inflammatory
- Support athletic performance, endurance and power output
- Support post-workout recovery
- Support healthy blood pressure
- Promote normal cholesterol levels
- Liver, kidney and blood support
- Cardiovascular system support



Product SKU: 823

Botanical Name: *Beta vulgaris*

Country of Origin: USA

Part Used: Root juice

Other Ingredients: Organic beet juice, Silicon dioxide 2% (an anti-caking agent)

Assay: Nitrate 1.4% - 2.1% [1.4 - 2.1g/100g]

Appearance: Purple-red powder

Wet-to-Dry-ratio: 12:1

Solubility: Highly Soluble

Shelf life: 3 years if sealed and stored away from sunlight at < 40% RH. Not over 75°F (24°C). This product is hygroscopic and tends to harden during warm temperatures.

Certifications: Organic, Kosher and Food grade

Certified Facility: SQF certified facility

Testing: Each production lot is tested for:

1. **Organoleptics** (In-house)
2. **Heavy Metals** (ICP-MS) [ISO / IEC17025 certified third party lab] - Arsenic, Cadmium, Lead, Mercury
3. **Microbials** (AOAC/FDA BAM/USP) [In-house and ISO / IEC17025 certified third party lab] - Total Plate Count, Yeast, Mold, E-coli, Coliforms, Salmonella, Staphylococcus
4. **Pesticides** (USDA NOP Quechers AOAC 2007.01/ USP 561) [ISO / IEC17025 certified third party lab] – tested for over 75 known pesticides
5. **Nitrates** EPA 300.0

Applications: Functional foods and beverages, Sports Nutrition (pre-workout, workout and post-workout formulations), capsule and tablet formulations, pet foods.

General Nutritional Information about Beetroot

Micronutrients

Excellent source of dietary nitrate which is transformed in the body to nitrite in the blood, then transformed to the biological messenger molecule, nitric oxide (NO).

- NO plays an important role in vascular and metabolic functioning, thereby supporting the cardiovascular system.¹
- Beetroot supplementation elevates plasma nitrite concentration, reducing systolic blood pressure² and increasing blood flow to the muscles and organs.

Studies on humans in recent years show that supplementation with dietary nitrate (in the form of beetroot juice) can be particularly beneficial to athletic performance.

- Improves power output, performance and cardiorespiratory endurance by increasing oxygen consumption efficiency.^{3,4,5,7}
- Reduces fatigue in low-intensity exercise and improves the time to exhaustion in submaximal and high-intensity exercise.⁶
- Increases blood flow to the muscles, reduces the depletion of glycogen in the muscles and strengthens muscle contraction, leading to an increase in muscular power and endurance.^{5,6} Also aids in muscle recovery after exercise by delivering more oxygen to the muscles due to the increased blood flow that results from higher blood nitrite levels.
- Improves reaction time during prolonged intermittent exercise.³

A good source of B-complex vitamins such as folate, niacin, pantothenic acid, pyridoxine and minerals such as iron, calcium, manganese, copper, phosphorus, magnesium, sodium and potassium.

Phytochemicals

Rich source of betalain pigments (the most abundant is betanin)

- Display potent antioxidant and anti-inflammatory activity¹ and provide support for blood and liver function.⁸

Contains smaller amounts of phenolic compounds such as flavonoids, phenolic acids and phenolic amides

- Phenolic constituents are highly bioactive, helping boost beetroot's antioxidant power.¹

Macronutrients

Protein: Contains 18 different amino acids

- Support cell growth and repair, muscle function, provide energy and a precursor to neurotransmitters and enzymes.

Carbohydrates: Main carbohydrate is sucrose, and also contains smaller amounts of glucose and fructose and contains fructans (a short chain carbohydrate), all of which provide energy.

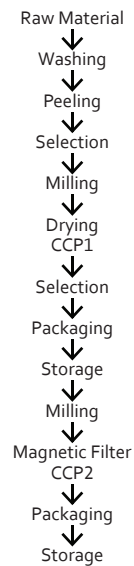
*The products and the information provided about specific products have not been evaluated by the United States Food and Drug Administration and are not approved to diagnose, treat, cure or prevent disease.

References

- ¹<http://www.sciencedirect.com/science/article/pii/S0889157515001003>
- ²<https://www.ncbi.nlm.nih.gov/pubmed/21071588>
- ³https://www.researchgate.net/publication/274642476_Dietary_nitrate_improves_sprint_performance_and_cognitive_function_during_prolonged_intermittent_exercise
- ⁴<https://www.ncbi.nlm.nih.gov/pubmed/21471821>
- ⁵https://www.researchgate.net/publication/322296159_Beetroot_juice_ingestion_during_prolonged_moderate-intensity_exercise_attenuates_progressive_rise_in_O2_uptake
- ⁶<https://www.ncbi.nlm.nih.gov/pubmed/20466802>
- ⁷<https://www.ncbi.nlm.nih.gov/pubmed/21071588>
- ⁸<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4425174/>

BeetPlus™ Nitrate-Rich Powder is a trademark of Nature's Power Nutraceuticals Corp.

Production Flow Chart



NUTRITION FACTS

Nutrition Facts			
Serving Size: 100 grams			
Servings Per Container: May Vary			
Amount Per Serving			
Calories: 354.78			
			% Daily Value*
Total Fat:	0 g		
Saturated Fat:	0 g		
Trans Fat:	0 g		
Cholesterol:	0 mg		
Sodium:	357.14 mg		
Total Carbohydrates:	74.57 g		
Dietary Fiber:	2.38 g		
Total Sugars:	62.86 g		
Added Sugar:	0 g		
Protein:	12.99 g		
Vitamin C:	3.81 mg		
Vitamin D:	0 IU		
Calcium:	71.65 mg		
Iron:	2.59 mg		
Potassium:	0.09 mg		
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs			
		2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

