

I N N A T E

RESPONSE FORMULAS®

V i s m e d i c a t r i x n a t u r a e

Prostate ResponseTM

100% Whole Food Targeted Response Dietary Supplement

Formula Rationale

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Formula Rationale of Prostate Response™

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The major known function of the prostate gland is to manufacture and secrete seminal fluid, which carries, nourishes, and protects the spermatozoa necessary for human reproduction. In addition, it helps maintain moisture that protects the lining of the urethra, the passage through which urine and seminal fluids flow out of the body. The prostate naturally enlarges as men mature with age. Enlargement or inflammation of the prostate glands may induce the following uncomfortable and/or bothersome conditions: increased urinary frequency or urgency, bladder obstruction, dribbling, feeling of incomplete voiding or reduced force of urinary stream. If an enlarged prostate is in fact the culprit and diagnosed as benign prostatic hypertrophy (BPH), there are a variety of key nutrients, medicinal foods and botanicals that specifically help to slow down this natural process, and promote the function of the male reproductive, urinary and prostate systems. Nutrients and botanicals clinically shown to specifically target and normalize a healthy prostate response were selected for this formula. Zinc from FoodState™, amino acids, tomato, cranberry saw palmetto, pygeum, nettle leaf and root are a few of the inclusions revered for their ability to target and promote prostate health.

- Purpose:** To improve the health and function of the prostate and genital-urinary system.
- Indications:** Benign prostatic hypertrophy (BPH), prostatitis, frequency and/or urgency in urination.
- Suggested Use:** 2 tablets, 1-2 times daily until symptoms subside. For maintenance program, 2 tablets daily. Suggested to be taken in conjunction with Men Over 40™ from Innate Response Formulas™, as directed.
- Contraindications:** May potentiate heart medications and/or diuretic drugs.

SUPPLEMENT FACTS

Serving Size 2 Tablets
 Servings per Container 30
 Calories 2

Total Fat	40	mg
Total Carbohydrate	180	mg
Dietary Fiber	50	mg
Sugars	130	mg
Protein	200	mg

SOURCE; FOODSTATE™ AMOUNT

Zinc	(<i>S. cerevisiae</i> *; 300 mg)	15	mg
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AMINO ACIDS

L-Glutamic Acid	250	mg
L-Alanine	100	mg
Glycine	50	mg

ADDITIONAL FOODS & EXTRACTS

Broccoli Concentrate 20:1	50	mg
Tomato Concentrate 15:1	40	mg
Cranberry Extract 25:1	25	mg
Pumpkin Seed Extract (25% fatty acids) 4:1	25	mg
Lycopene (from tomato)	3	mg

BOTANICAL EXTRACTS

Saw Palmetto Berry (<i>Serenoa repens</i>) 85 to 95% fatty acids & sterols	320	mg
Nettle Root (<i>Urtica dioica</i>) 4:1	200	mg
Pygeum Bark (<i>Pygeum africanum</i>) 5:1	100	mg
Marshmallow Root (<i>Althea officinalis</i>) 4:1 ..	25	mg
Nettle Leaf (<i>Urtica dioica</i>) 4:1	25	mg

NATURALLY OCCURRING FOOD CONSTITUENTS

Bioactive Peptides, Enzymes, Chlorophyll, SOD, Glutathione, Beta Glucans, Lipoic Acid, Essential Trace Minerals, GABA, Glutamic Acid, Polysaccharides, CoQ10 and other Compounds.

OTHER INGREDIENTS

Rice Bran, Guar Gum, Vegetable Stearic Acid, Silica, Pharmaceutical Glaze.

*FoodState™ 100% Food Concentrates.

FoodState™ food concentrates are proprietarily grown and harvested at peak of ripeness to deliver optimal concentrations of vitamins and minerals.

FoodState™ Concentrate

S. cerevisiae, yeast

Nutrient Delivered

Zinc

Note the total weight of the food concentrate listed above in the supplements facts is the amount of food delivered within each serving size in order to deliver a specific amount of Zinc per serving.

Rationale for Nutrients

FoodState™ Zinc

The prostate contains higher levels of zinc than any other organ. Zinc is also present in seminal fluid, produced and secreted by the prostate gland. Studies have suggested that maintaining proper levels of zinc in the seminal fluid contributes to maintaining a healthy prostate and in relieving symptoms associated with benign prostatic hyperplasia (BPH). The efficacy of zinc is due in part to zinc's involvement with androgen metabolism. Zinc has been shown to inhibit the activity of 5-alpha reductase (the enzyme responsible for converting testosterone to DHT or dihydrotestosterone, an active form of testosterone) and so can interfere with the effect of certain androgens on the prostate and help to slow the prostate's growth. By reducing the size of the prostate gland many of the associated symptoms and discomfort may also be alleviated.

L-glutamic acid, L-alanine, Glycine

This amino acid combination has been studied in the treatment of BPH. The study revealed that 66% of the participating men showed signs of improvement from many of the symptoms associated with BPH including: nocturia, urgency and frequency of urination, and enlargement¹. The dosage of the tri-amino acid combination in Prostate Response™ is equivalent to the dose effectively administered in the study.

Rationale for Additional Foods and Extracts

Broccoli brassica concentrate *Oleracea italica* 20:1

A crucifer, broccoli was included in the formula for its rich content of nourishing vitamins, carotenoids and indole compounds (indole-3-carbinol and sulforaphane). Indoles have strong antioxidant activity and inherently target and support prostate health. Indoles also support the production of phase II liver detoxification enzymes.

Tomato (*Lycopersicon esculentum*) concentrate & Lycopene

Tomato concentrate was included for the array of beneficial compounds it provides including the carotenoid lycopene. Moderate consumption of tomatoes, particularly extracted/concentrated tomato products, is known to contribute to cholesterol management, cardiovascular, breast and prostate health. One Harvard study revealed a direct link between a lower risk of prostate cancer in men whose diets were rich in tomatoes and tomato products². The Harvard study findings are consistent with other studies that have reported a low incidence of prostate cancer in southern Mediterranean countries. This significant health benefit is primarily linked to the rich content of lycopene. Tomatoes are also rich in phenolic acids, carotenoids and chlorogenic acid, all of which are potent antioxidant and detoxifying compounds.

Pumpkin seed

Pumpkin seed is an important inclusion in the diet of those challenged by prostate function; been used medicinally to help relieve symptoms of BPH, they are approved for use in BPH by Germany's Commission E. Pumpkin seeds contain omega -3 fatty acids, plant sterols and zinc, all of which have been traditionally used to support the health of the prostate gland and urinary tract health.

Cranberry extract

Cranberry was included to support the health of the urinary tract system. The enlargement of the prostate gland can result in a gradual squeezing of the urethra, sometimes causing difficulty in urinating. Blockage of the urethra from an enlarged prostate gland BPH may lead to repeated urinary tract infections, a sudden inability to urinate, or gradual bladder and/or kidney damage. Cranberry is rich in tannin compounds that have been shown to inhibit the adherence of the bacteria to the urethra and bladder lining, thereby reducing the risk of infection.

¹ Feinblatt, HM, Gant, JC. " Palliative treatment of benign prostatic hypertrophy: Value of glycine, alanine, glutamic acid combination." *J Maine Med Assoc* 46:99-102, 1958

² Clinton SK, Emenhiser C, Schwartz SJ, Bostwick DG, Williams AW, Moore BJ, Erdman JW Jr Dana-Farber Cancer Institute, Harvard Medical School, Boston, Massachusetts 02115-6084, USA.

Rationale for Botanicals

Herbs, invaluable for their rich mineral and phytonutrient content, and their ability to gently strengthen and promote the health of a man's reproductive and genital-urinary function, were selected for the Prostate Response™ formula. Herbs, similar to whole foods, have the innate ability to “stitch together” the diverse fabrics of our physiology into a more unified whole³. The herbs included in Prostate Response™ were selected based on their innate ability to inherently target and restore the health of the male reproductive and urinary health systems.

Saw palmetto berry *Serenoa repens* (Batr.) 5:1

Saw palmetto is the primary herbal inclusion in this formula and is the best-documented herbal treatment for BPH. Clinically, saw palmetto berry has widely been used to effectively reduce prostate enlargement and the symptoms associated with this condition. Numerous studies have demonstrated that saw palmetto supports prostate health and function. This tonic supports the reproductive system and urinary tract with support for the prostate gland, which often is required support during this phase of a man's life. The fatty acids in these berries contain phyto-sterols which are known to support and enhance male hormone production as needed.

Actions: Diuretic, urinary antiseptic

Nettle root *Urtica dioica* 4:1

Stinging nettle root is used in Germany as a component of approved medicines for treatment of benign prostatic hyperplasia (BPH). Recent research on the use of nettles in relieving symptoms of BPH indicate that nettle root can interfere with or block a number of these hormone-related chemical processes in the body that are implicated in the development of BPH⁴. Additional studies have shown that it improves urine flow, reduces urinary frequency and nocturia, and decreases the volume of urinary residue. The roots of the nettle plant affect natural sex steroid compounds, and proteins that carry them in the body. The approved modern therapeutic applications for stinging nettle herb, leaf and root are supportable based on their history of clinical use in well-established systems of traditional medicine, on well-documented phytochemical investigations, on pharmacological studies in animals, and on human clinical studies⁵.

Actions: Anti-inflammatory, diuretic, astringent

Pygeum bark *Pygeum africanum* 5:1

Pygeum africanum, combined with saw palmetto, has been shown to have amplified effectiveness in supporting healthy prostate function. Several studies suggest that pygeum can reduce symptoms of prostate enlargement such as nighttime urination, urinary frequency, and residual urine volume⁶. Pygeum contains several natural chemicals that have anti-inflammatory effects on body tissues. Inflammation is increasingly being recognized as having a role in a range of serious diseases.

Actions: Anti-inflammatory

³ *Naturopathic Handbook of Herbal Formulas*. Richard Scalzo. Kivaki Press, p. 3, 1994.

⁴ Konrad, L., et al. “Antiproliferative effect on human prostate cancer cells by a stinging nettle root (*Urtica dioica*) extract.” *Planta Med.* 2000; 66(1): 44-7.

⁵ American Botanical Council's Herb-Ed-Web™ , www.herbalgram.org/iherb/expandedcommissione Title search: Stinging Nettle root

Marshmallow root *Althaea officinalis* 4:1

Included for its high mucilage content, marshmallow is soothing and healing to inflamed mucous membranes. Used internally, marshmallow has been effectively used to soothe mucosal afflictions of the genital-urinary tract.

Actions: Diuretic, emollient, anti-inflammatory

Nettle leaf *Urtica dioica* L. 4:1

Nettle is regarded as a superior tonic and nutritive herb for strengthening and supporting the whole body. Nettle leaves are abundant in chlorophyll, calcium, magnesium, iron, potassium and vitamins A, C and K, nutrients vital to a man's well-being. Daily tonic use of nettles is known to nourish the nervous system, hair and skin, as well as strengthen bones.

Actions: Body tonic, mild diuretic

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