# P3: 0

# PEAK PERFORMANCE & PREVENTION

# **Clinical Applications**

- Supports Healthy Lower Urinary Tract (LUT) Function in Men\*
- Supports Normal Urinary Flow and Nocturnal Frequency\*
- Supports Healthy Prostate-Related Hormone Metabolism\*
- Supports Prostate Health\*

P3: ○ supports normal male lower urinary tract function and prostate health. Clinically meaningful levels of key ingredients target urinary flow and frequency as well as prostate-related hormone metabolism. This formula features FLOWENS®—a full-spectrum cranberry powder optimized for men's health—combined with betasitosterol, pyridoxal 5'-phosphate,TRAACS® zinc bisglycinate chelate, and highly concentrated, standardized extracts of saw palmetto and pygeum.\*

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

## **Discussion**

As men age, the need for maintaining or supporting normal prostate and lower urinary tract (LUT) health and function increases. P3: O represents the latest in specialized formulations for men.

#### **FLOWENS®**

Cranberry fruit has a history of use among Native Americans for kidney and urinary health. [1] Modern research supports this traditional use. [1-4] Cranberry fruit is recognized as a rich source of oligosaccharides and phytochemicals, including proanthocyanidins, flavonols, and triterpenoids. FLOWENS is a 100% all-natural, full-spectrum cranberry powder designed and optimized for men's health. In a clinical study, FLOWENS was shown to improve quality of life and support urinary tract function with improvements noted within the first month of supplementation. In a six-month double-blind, randomized, placebo-controlled study, supplementation with 250 or 500 mg/d of FLOWENS resulted in clinically-relevant, dose-dependent improvements in primary (a clinically validated questionnaire) and secondary (e.g., uroflowmetry scores, urine storage) outcome measures related to prostate function in men older than 45 years. No side effects were reported. The researchers suggested that the observed effects may have resulted from activities on detrusor contraction and relaxation, modulation of the micturition reflex, or a reduction in certain cytokines.\*

#### Saw Palmetto (Serenoa repens)

Saw palmetto extracts have been widely used in Europe and more recently in the United States as a natural way to help maintain normal prostate health and LUT function. A systematic review<sup>[5]</sup> of 18 randomized controlled trials involving 2,939 men and another analysis of 21 clinical trials involving 3,000 men and reviewed by Cochrane<sup>[6]</sup> support the safety and efficacy of saw palmetto extract preparations, and animal and human clinical trials continue to support a role for saw palmetto in prostate health.<sup>[7-10]</sup> Mechanisms of action have not been fully elucidated, but there is evidence that saw palmetto inhibits 5-alpha reductase (5AR)—the enzyme that reduces testosterone to the more potent androgen dihydrotestosterone (DHT).\*(11,12) Other effects have been proposed, including that saw palmetto prevents DHT from binding to androgen receptors, has antiestrogenic and antiproliferative effects, inhibits growth factors, affects alpha-1 adrenoceptors and 1,4-dihydropyridine receptors, and helps maintain healthy fluid balance in prostate tissues.<sup>[7,12-15]</sup> P3: [] features a high-quality, standardized (85% free fatty acids) extract to assure the opportunity for the best clinical outcomes.\*

#### Pygeum Africanum (Pygeum africanum)

The use of pygeum dates back approximately 300 years, and extracts are a well-known and often-used alternative for supporting prostate health in many European countries. [16] Numerous open and placebo-controlled studies in large populations have demonstrated its efficacy and acceptability for supporting healthy urine flow and volume, reducing nocturnal voiding, and improving quality of life. [17-21] Multiple mechanisms of action have been proposed for the genitourinary effects of pygeum, which contains numerous beneficial constituents, such as beta-sitosterol. Mechanisms are thought to include 5AR inhibition; estrogenic, antiandrogenic, and antiproliferative effects; and modulation of cell signaling molecules, including cytokines. \*[18,20]

#### **Beta-Sitosterol**

Beta-sitosterol is a plant phytosterol commonly used to promote LUT function in men. In a randomized, double-blind, placebo-controlled, multicenter study, 200 patients were supplemented with 20 mg of beta-sitosterol three times per day or placebo. Significant improvements in urinary flow parameters were observed in the beta-sitosterol group only.<sup>[22]</sup> In a follow-up study, the beneficial effects of beta-sitosterol treatment were maintained for 18 months.<sup>[23]</sup> In a six-month randomized, double-blind, placebo-controlled clinical trial (n = 177), 130 mg/d of beta-sitosterol resulted in significant improvements in patients' quality of life, urinary flow rate, and residual volume compared to placebo. <sup>[24]</sup> A systematic review of clinical trials also supported the benefits of beta-sitosterol to LUT function in men.\*<sup>[25]</sup>

#### Zinc and Vitamin B6

Zinc is highly concentrated in the prostate gland, and a lack of zinc may be associated with a reduced DNA damage and repair response in prostate tissue. [26] Therefore, zinc adequacy is vital for optimal prostate health, especially with advancing age. [27] In this formula, zinc is provided as the highly absorbable Albion® TRAACS® zinc bisglycinate chelate. Pyridoxal 5'-phosphate (P5P) is the active form of vitamin B6. In a population-based prospective study of 525 men, Kasperzyk et al found that high vitamin B6 intake had an inverse association with prostate-related mortality.\* [28]

\*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. P3: 0

#### Supplement Facts Serving Size: 2 Softgels Servings Per Container: 30 Amount Per Serving %Daily Value Vitamin B6 (as pyridoxal 5'- phosphate) 588% 10 mg Zinc (as TRAACS® zinc bisglycinate chelate 30 ma FLOWENS® Cranberry Fruit Solids (Vaccinium macrocarpon)(fruits) 500 ma Saw Palmetto Extract 320 ma (Serenoa repens)(dried fruits)(85% free fatty acids) 180 mg Beta-Sitosterol Pygeum Extract (Prunus africana)(bark)(2.5% beta-sitosterol) 100 mg \* Daily Value not established.

Other Ingredients: Organic flaxseed oil, softgel (bovine gelatin, sorbitol, vegetable glycerin, purified water, and natural caramel color), sunflower lecithin, tricalcium phosphate, maltodextrin, citric acid, and silica.

TRAACS® is a registered trademark of Albion Laboratories. Inc.

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## **Directions**

Take one to two softgels daily, or use as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

### Formulated To Exclude

Wheat, gluten, yeast, soy protein, dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

## References

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