

*Supports healthy prostate and urinary function
without lowering dihydrotestosterone*

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Prostect™ represents a novel approach to managing lower urinary tract symptoms (LUTS) in aging men with or without benign prostate hypertrophy (BPH) and/or prostatitis (PT) due to mechanisms of action that are independent of effects on prostate size or testosterone and dihydrotestosterone (DHT) levels. It is composed of three ingredients with synergistic and complementary actions: a standardized cranberry extract, a proprietary pollen extract from Graminex®, and a standardized pomegranate concentrate. The benefits of Prostect™ may be observed within just 3-6 months of supplementation. Unlike classic saw palmetto based formulas, Prostect™ is not intended to reduce dihydrotestosterone levels, as this may be undesirable for patients with testosterone deficiency, potentially leading to impaired sexual function and other side effects.

Prostect™ may be taken preventatively or in support of:

- ▶ Reduction of symptoms and inhibition of physiological processes involved in benign prostate hypertrophy (BPH) and prostatitis from various causes
- ▶ Reduction of lower urinary tract symptoms (LUTS) independently of its effect on lowering prostate size and/or fibrosis
- ▶ Potential to lower levels of PSA from various causes
- ▶ Reduction of aberrant prostate cell proliferation
- ▶ Reduced risk of urinary tract infections

LUTS is characterized by difficulty urinating, incomplete voiding of the bladder, and/or frequent urination due to irritable bladder. LUTS etiology may involve BPH, PT (of bacterial or non-bacterial origin), or prostate cancer, as well as other unidentified factors. In addition, urinary tract infections may occur more often in association with LUTS due to incomplete urine voiding.

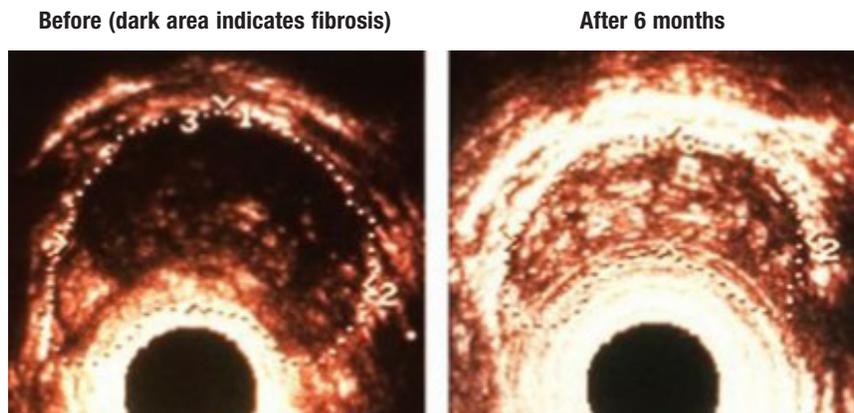
BPH occurs in approximately 20%, 50% and 75% of men by the age of 40, 50 and 80, respectively, and LUTS follows a similar pattern of age-related increase in incidence.⁶ Prostate cancer occurs at the microscopic level in 30% of men between ages 20 and 40, while the risk of developing overt prostate cancer with clinical symptoms becomes significant after age 50.

While there are pharmaceutical drugs available for BPH, LUTS and PT, many of them have lackluster efficacy and present undesirable side effects. Regarding prostate cancer, specifically, recent scientific analyses have brought to light considerable controversy surrounding the diagnostic value of elevated PSA.³ While some healthcare professionals dismiss or downplay the relevance of elevated PSA, one cannot rule out that a faster than normal rise in PSA may indicate the presence of various inflammatory, infectious and/or pre-cancerous or cancerous conditions. Many integrative healthcare practitioners view nutraceutical interventions that lower PSA as potentially beneficial, especially since these present no harmful side effects and may, in fact, offer systemic health benefits. A nontoxic nutraceutical strategy, especially if used early after detection, may be a good option for those who choose a “watch and wait” approach.

Synergy of Graminex® Flower Pollen, Cranberry and Pomegranate Extracts

The three ingredients in Prostect™ – Graminex® Flower Pollen, Cranberry and Pomegranate Extract – have been shown in studies to achieve the following effects:

- 1. Shrinking an enlarged prostate.** Human studies with Graminex® pollen extract involving BPH patients in stage II and stage III show an anti-inflammatory effect and a marked reduction in prostate volume.⁷⁻⁹ One of these studies performed a transrectal ultrasonogram of the prostate before and after six months of treatment with Graminex® pollen extract, which illustrated the marked reduction of the circumference, internal swelling and fibrosis of the prostate (Figure 1).⁹ This study also observed a significant reduction in the clinical symptoms associated with BPH. Figure 2 illustrates specific mechanisms of action explaining the effects of this pollen extract on mitigating prostate enlargement. One human study using Graminex® pollen extract evaluated symptoms of prostatodynia and others associated with BPH and found that 78% of subjects had significant improvement in the measured symptoms, with 60% experiencing a complete resolution.¹¹



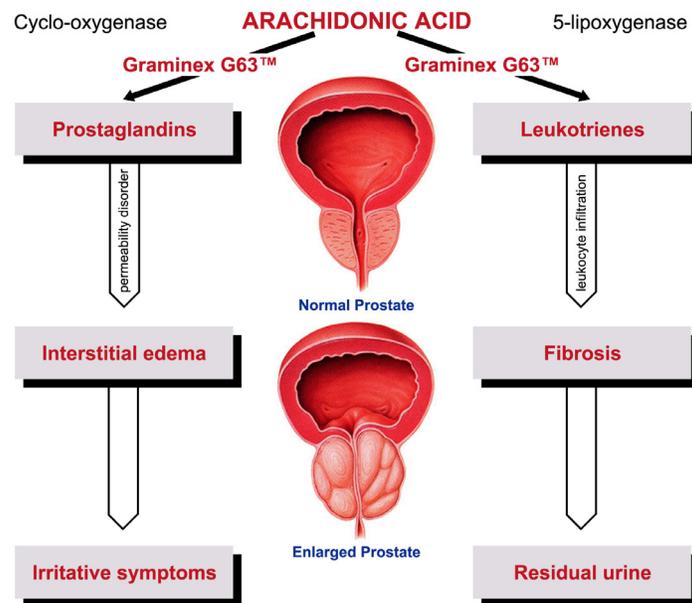
*Figure 1: Sonogram shows prostate shrinkage and reduced fibrosis after 6 months treatment with Graminex® pollen extract.⁹

- 2. Improvement in urinary symptoms of LUTS.** A number of placebo controlled, double-blind studies with Graminex® pollen extract provide evidence that it is effective in reducing nocturia, daytime urinary frequency, and a sensation of residual urine.¹⁰⁻¹⁴ Specifically, one study showed that “after treatment, residual urine volume has been shown to significantly decrease by an average of 47%”.¹²

A number of studies employing various cranberry extracts have demonstrated an improvement in LUTS in a relatively short time (3-6 months) which was likely not derived from a change in prostate size, but rather, possibly from other physiological mechanisms. One study achieved statistical improvement of LUTS in 70% of the supplemented group with no influence on blood testosterone levels.¹⁷
- 3. Improvement in BPH-induced sexual side effects.** In a study using Graminex® pollen extract, patients experienced an improvement in symptoms of perineal pain, erection difficulty, ejaculation difficulty and pain during urination throughout the course of treatment.¹⁶ In addition, the pomegranate extract used in Prostect™ was shown to improve erectile function, likely by enhancing nitric oxide availability.¹⁹
- 4. Positive effects on PSA.** One study using cranberry extract demonstrated a lowering of PSA in 80% of men from a group with LUTS or non-bacterial prostatitis, who had negative prostate biopsies for cancer.¹⁷ A study using pomegranate demonstrated that, as a result of intervention with this extract, PSA doubling time was increased in prostate cancer patients (i.e., rise in PSA was slower) while 13% of them experienced a reduction in total PSA levels.²⁰
- 5. Reduced risk of UTIs.** The well proven antimicrobial effects of cranberry constituents support a reduction in risk of urinary tract infections by reducing adhesion of microbes to epithelial surfaces and possibly direct microbial killing action by hippuric acid, a metabolite of its components.¹⁷ Antimicrobial effects were also shown with pollen and pomegranate extracts.^{1,21}
- 6. Reduced conversion of testosterone to estrogen.** Excessive testosterone conversion to estrogen may have detrimental effects on men’s health, including contribution to BPH.⁴ Elagitannins derived from pomegranate were shown in an in vitro study to inhibit the aromatase enzyme, which converts androgens to estrogens.⁵

Graminex® Flower Pollen, Cranberry and Pomegranate Extracts: Molecular Mechanisms of Action

- Anti-inflammatory actions due to inhibition of COX-2 and LOX enzymes, as well as NF-kappa B expression^{1,18,21}
- Reduced rate of prostate cell proliferation, which may be due in part to inhibitory effects of flower pollen extract on inflammatory pathways^{11,12}
- Increased apoptosis and reduced angiogenesis (which reduces metastatic potential) from cranberry extract¹⁸ and pomegranate extract^{20,21}
- Antimicrobial (anti-adhesive and direct microbicidal) effects in the urinary and GI tracts^{18,21}
- Diuretic effects^{17,18}



*Figure 2: Mechanisms of action of Graminex® pollen extract involved in prostate growth

Graminex® Flower Pollen, Cranberry and Pomegranate Extracts: Additional Highlights

- Graminex® Flower Pollen Extract** – The flower pollen extracts produced by Graminex® are supported by over 100 clinical studies for various applications since 1967.¹ Graminex® states that their extraction process includes removal of the allergenic components of pollen. This process also ensures a standardization of the active ingredients to support consistent clinical results.
- Cranberry Extract** – In addition to the effects detailed earlier, cranberry extract has demonstrated the following benefits: antioxidant, anti-inflammatory, cardiovascular benefits, reduced unhealthy cell proliferation, anti-viral, anti-H. pylori.^{17,18}
- Pomegranate Extract** – The pomegranate extract used in Prostatect™ is the most researched pomegranate extract available on the market today, with 166 studies completed. In addition to the benefits mentioned earlier, others demonstrated include: potent antioxidant, improved markers of cardiovascular health, and in vitro inhibition of various undesirable changes in prostate cells.²¹

Synergistic Effects of Prostatect™ with Additional Nutrients

In conjunction with Prostatect™, it is strongly recommended to optimize vitamin D status and omega-3/omega-6 fatty acid levels and ratios, since these greatly affect cell proliferation, inflammation and other unhealthy physiological processes. In addition, zinc and selenium provide further benefits for prostate health.

Supplement Facts

Serving Size 3 capsules
Servings Per Container 30

Amount Per Serving	% Daily Value
Cranberry Extract (<i>Vaccinium macrocarpon</i>)(fruit)	500 mg *
Pomegranate Extract (<i>Punica granatum</i>)(fruit)	500 mg *
Flower Pollen Extract (as Graminex® G60® and GFX™) (<i>Secale cereale L.</i>)(pollen)	126 mg *

*Daily Value not established.

Other Ingredients: Cellulose (capsule), microcrystalline cellulose, tapioca dextrin, silicon dioxide, vegetable stearate.



Recommended Use

- As a dietary supplement, take three capsules per day with a meal, or as directed by your health care practitioner.

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