

PROSTA is a food supplement that combines several ingredients which act in synergy and are recognized for their positive effects on the prostate gland, preventing and treating its disorders.

The most common prostate disorders are benign prostatic hyperplasia (BPH), prostatitis and cancer. After age 40, due to hormonal changes, men usually suffer from some disorder of the prostate gland, which begins to change and enlarge (BPH), affecting urinary and sexual function.

Some of the symptoms of BPH are obstruction of the urinary ducts, the desire to urinate frequently, even at night, urinary urgency, intermittent and weak urine flow and the inability to completely empty the bladder.

The prostate develops under the influence of androgens like dihydrotestosterone (DHT), formed by the enzyme 5-alpha reductase. High levels of prolactin and oestrogen increase the accumulation of testosterone, making the elimination of DHT difficult. Epidermic growth factor (EGF) also stimulates an increase in the prostate gland. Modern diets with a high sugar content can also increase a growth factor, stimulating prostate cells 4 times more than the accumulation of testosterone. Oestrogens such as estradiol, chemical products from plastics, herbicides and pesticides also stimulate prostate cells. The normal elimination of tissue cells through apoptosis is interrupted due to poor diet and toxins, and the result is often an enlargement of the prostate gland, which left untreated can eventually lead to prostate cancer.

The gland can also be affected by infection and inflammation (prostatitis), which is associated with symptoms such as pain upon urination and fever.

The pressure exerted by bicycles seats, circulatory congestion in the pelvic cavity from obesity, and a sedentary lifestyle can also be causes of prostate gland problems.

High cholesterol is also an important factor in prostate problems, since it initiates the degeneration of prostate cells which can promote enlargement of the prostate. It is therefore important to prevent cholesterol from accumulating in prostate cells.

Diet is fundamental for the prevention of prostate problems, and supplementation with nutrients that help maintain good prostate health should be considered, along with a proper diet and physical exercise.

Diverse studies indicate that certain antioxidants, essential fatty acids, vitamins, minerals, amino acids and plants can be of help.

Ingredients: Plant sterols, saw palmetto oil extract (*Serenoa repens*), olive oil (extra virgin) (*Olea europaea*), **rye** flower pollen extract (*Secale cereale*), borage oil (*Borago officinalis*), pumpkin seed oil (*Cucurbita pepo*), zinc citrate, mixed tocopherols (vit. E), cranberry fruit concentrate (*Vaccinium macrocarpon*), L-alanine, L-glycine, L-glutamic acid hydrochloride, gelling agent (sunflower lecithin), stinging nettle extract (*Urtica dioica*), pau d'arco bark (*Tabebuia avellanedae/T. heptaphylla*), pyridoxine hydrochloride (vit. B6), anticaking agent (silicon dioxide), thickener (beeswax), tomato extract (*Solanum lycopersicum*), L-selenomethionine, cholecalciferol (vit. D3), annatto extract (*Bixa orellana*) softgel (glazing agent: gelatin; humectant: glycerol and purified water).

Nutritional information:	1 softgel (1 788 mg)
Plant sterols (40% beta-sitosterol, 20% stigmasterol and 20% campesterol)	185 mg
Saw palmetto (95% fatty acids)	160 mg
Rye flower pollen	105 mg
Borage oil ⁽¹⁾	100 mg
L-Alanine	50 mg
Cranberry (107x concentrate)	50 mg
L-Glutamic acid hydrochloride	50 mg
L-Glycine	50 mg
Vitamin E	4 mg α-TE (33%*)
Stinging nettle (5% silicic acid)	25 mg
Zinc (citrate)	16 mg (160%*)
Pau d'arco	15 mg
Vitamin B ₆ (pyridoxine)	8.23 mg (588%*)
Lycopene (from tomato)	0.6 mg
Selenium (L-selenomethionine)	50 µg (91%*)
Vitamin D ₃ (500 IU / softgel)	12.5 µg (250%*)
Olive oil (extra-virgin)	175 mg
Pumpkin seed oil	100 mg

*NRV: Nutrient Reference Value in % ⁽¹⁾ from controlled cultivation

Size and format:

60 softgels

Recommended daily dose:

1-2 softgels daily with a meal.

Some men might need to take 2 softgels daily. As food supplement or for prevention 1 softgel daily may be enough.

Do not exceed the stated recommended daily dose.

Indications and uses:

Different studies have shown that the ingredients in PROSTA can be of help for the following:

The prevention of problems related with the prostate gland, good prostate health maintenance and relief of prostatitis (infection and inflammation).

The relief of the symptoms of benign prostatic hyperplasia: a frequent desire to urinate, urinary urgency, intermittent and weak urine flow, inability to completely empty the bladder, nocturia.

It is also effective in the treatment of prostate gland disorders.

Cautions:

Consult a health-care practitioner prior to use if you have a history of kidney stones; to exclude a diagnosis of prostate cancer; or if you are taking blood thinners. Zinc supplementation can cause a copper deficiency.

STEROLS AND STEROLINS WITH BETA-SITOSTEROLS, STIGMASTEROLS AND CAMPESTEROLS: These significantly inhibit the enzyme 5-alpha reductase, involved in testosterone metabolism, and therefore reduce DHT. They regulate cholesterol, which is basic for sex hormone function, and balance T-cells (immunologic helpers)^(1,2,13,14).

SAW PALMETTO OIL (*SERENOA REPENS*) STANDARDIZED EXTRACT 95%: This is a natural source of Beta-sitosterols, which reduce DHT. It prevents the intraprostatic conversion of testosterone into DHT and inhibits the transport and intracellular organization of DHT. It is an anti-oestrogenic, anti-inflammatory and anti-oedema agent, and has shown excellent results in improving the symptoms of BPH^(3,4).

STANDARDIZED STINGING NETTLE EXTRACT: This is a good diuretic, increasing urine flow and reducing its residue, which can be a cause of infection. This extract interferes with testosterone metabolism⁽⁵⁾.

RYE FLOWER POLLEN EXTRACT: This has long been used in Europe, and has proven to relieve the symptoms of BPH and prevent prostate gland enlargement. It inhibits the growth of prostate cells and has an anti-inflammatory action⁽⁶⁾.

VITAMIN E TOCOPHEROL MIX: This is a powerful antioxidant that also helps control cholesterol levels and protect against cancer. It inhibits the growth of prostate cells, induces apoptosis (elimination) of old prostate cells and acts in synergy with lycopene⁽⁷⁾.

PUMPKIN SEED: This is rich in important nutrients for the prostate such as zinc and the amino acids glycine, alanine and glutamic acid, as well as essential fatty acids⁽⁸⁾.

ZINC CITRATE: This is a very well absorbed form of the mineral. Zinc plays a very important role in the prevention and treatment of BPH. It is involved in many aspects of hormone metabolism. The prostate accumulates it in order to regulate the entry of DHT, and groups together free DHT and inhibits its production. Zinc reduces the production of prolactin in the pituitary gland and groups together free prolactin. Zinc has been shown to reduce prostate size⁽⁹⁾.

PAU D'ARCO/LAPACHO (*Tabebuia avellanedae*/T. *heptaphylla*): contains quinones which fight fungal, yeast and viral infections, including activity against onco-viruses. It also has a very important antibacterial activity^(20,21).

LYCOPENE: Lycopene is a type of carotenoid. It's an antioxidant that prevents DNA damage in prostate cells, and prevents and treats prostate cancer⁽¹⁰⁾.

SELENOMETHIONINE: An antioxidant mineral that quickly accumulates in the prostate gland, it acts in synergy with vitamin E and reduces the risk of cancer⁽¹¹⁾.

ORGANIC BORAGE OIL: Borage oil is rich in omega-3 essential fatty acids, which regulate the series 2 prostaglandins (PGE2) that cause inflammation and release many tissue growth factors⁽¹²⁾.

ORGANIC OLIVE OIL: Olive oil contains oleic acid, which inhibits the production of PGE2, reduces inflammation and increases apoptosis⁽¹⁶⁾.

CRANBERRY: Cranberry acidifies the urine, is astringent and prevents the adhesion of bacteria in the urinary tract⁽¹⁵⁾.

VITAMIN B6: This is an essential co-factor in many enzymatic systems, from energy production to detoxification. Pyridoxine regulates steroid receptors and DHT absorption. Vitamin B₆ also works in synergy with zinc⁽¹⁸⁾.

L-ALANINE, L-GLYCINE AND L-GLUTAMIC ACID: This is a synergic combination of amino acids that has been proven in several studies since the 1950s to reduce the symptoms of benign prostatic hyperplasia⁽¹⁹⁾.

VITAMIN D: Many epidemiological studies have shown a relationship between a deficit in vitamin D and the risk of prostate cancer, observing that patients with prostate cancer present lower serum levels of the vitamin D metabolite than control patients. Prostate cells contain receptors for the active form of vitamin D, and when they are cancerous, apoptosis occurs in the presence of this vitamin, along with a decrease in their proliferation, invasion and metastasis⁽¹⁷⁾.

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