PROSTALEAVE

Ingredients

• Saw Palmetto (Serenoa repens)

Mechanism of action

Anti-inflammatory activity

- Blocked conversion of testosterone to dihydrotestosterone (DHT)
- Prostate epithelial involution
- Slow down the production of 5-alpha reductase enzyme

Approved by Commission E:

- Prostate complaints
- Irritable bladder

Used for

- Hair loss
- Hormone problems
- Low sex drive
- Pelvic pain
- Low sperm count
- Urinary problems in BPH • Prostate complaints
- Irritable bladder
- Relieves the difficulties associated with an enlarged prostate • Enhancing erectile responses by inhibition of phosphodiesterase 5 activity

Benefits

- Increase testosterone levels,
- Improve prostate health,
- Reduce inflammation,
- Prevent hair loss,
- Enhance urinary tract function
- Enhancing erectile responses

Dosage instructions

Take one tablet daily with plenty of water

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PROSTALEAVE

YOUR BETTER CHOICE FOR ENHANCE PROSTATE HEALTH

- Slow down the production of 5-alpha reductase enzyme
- Enhancing erectile responses as phosphodiesterase 5 inhibitor







BPH is a nearly universal result of the aging process in men. As the prostate gland enlarges, it can cause both obstructive and irritative symptoms; Saw palmetto is widely used to improve urinary symptoms associated with benign prostate hyperplasia (BPH), all over the world. it is used in 50 percent of treatments for BPH in Italy and in 90 percent of such treatments in Germany

Help Treating Benign Prostatic Hyperplasia (BPH)

A man's prostate gland, which is about the size of a walnut, helps make seminal fluid (semen). BPH, which is very common among men as they get older, happens when that gland gets larger than it should be. That can start to block the urethra, the tube that carries urine out of a man's body, and cause trouble with urination, like starting or stopping, peeing too often, or having to pee during the night.

Some studies show that the supplement might prevent enlargement of the prostate gland. Other possibilities are that it eases inflammation or keeps your body from changing the hormone testosterone into another hormone called dihydrotestosterone (DHT), which may play a role in BPH.

There is some evidence that it might help ease the symptoms of benign prostatic hyperplasia (BPH). [1]

In one small 12-week study, men who took 1,000 mg daily of saw palmetto oil enriched with beta-sitosterol, a compound found naturally in many plants, experienced significant improvements in BPH symptoms compared with those who took unenriched saw palmetto oil.[6]

Similarly, a 24-week study in 354 men found that taking 320 mg of saw palmetto decreased symptoms of BPH and improved urinary flow, quality of life, and sexual function compared with a placebo.^[8]

Other human studies also indicate that this supplement may reduce urinary symptoms and inflammation related to BPH ^(8, 9, 10).

What's more, a 15-year study in 30 men concluded that taking 320 mg of saw palmetto extract daily may help prevent the progression of BPH⁽⁷⁾.

Anti-Androgenic Effects

The lipophilic extract of the herb inhibits binding of dihydrotestosterone (DHT) to the cytosolic androgenic receptor and alpha 1-adrenoceptor in the prostate, thus preventing accumulation of the steroid, which may lead to prostate hyperplasia. Antiandrogenic effects of the lipophilic extract also consist of 5alpha-reductase and 3-ketosteroid reductase inhibition. These enzymes are responsible for the conversion of W* testosterone to DHT and for conversion of DHT to an androgen compound, respectively. [28]

Anti-Estrogenic Effects

The herb lowers cytosol and nuclear receptor values for estrogen which result in an anti-estrogen effect since progesterone receptor content is linked to estrogenic activity. Anti-estrogenic agents inhibit stromatic prostate mass growth in patients with benign prostate hypertrophy. There is also some evidence with inhibition of several steps involved in prolactin receptor signal transduction in ovary cells and reducing PSA level. [28] The PSA level in blood is measured in units called nanograms per milliliter (ng/mL). The chance of having prostate cancer goes up as the PSA level goes up.

Anti-Inflammatory Effects

The hexane extracts of the herb have demonstrated anti-inflammatory activity Inhibition of the synthesis of arachidonic acid inflammatory metabolites, through a double blocking of cyclooxygenase and 5-lipoxygenase pathways results in anti-inflammatory properties.

The drug also contains anti-spasmodic properties by inhibiting calcium influx and activation of the sodium/calcium ion exchanger. Induction of-protein synthesis plays a role in the antispasmotic effect with cyclic AMP as a possible mediator. Extracts of the drug may also antagonize the contracting effect of acetylcholine on urinary bladders. [28]

The advantages compare to similar drugs

- Better tolerated
- Less expensive
- No drug interactions
- Minor and rare side effects • less likely to decrease

An ultimate solution for:

• Improves urinary tract symptoms related to BPH

- Enhance prostate health,
- Balance hormone levels,
- Prevent hair loss in men
- Improve urinary tract function
- Reduce urinary symptoms and inflammation
- Help prevent prostate cancer

Rx CAP Rx Symptoms Reduce Size Prevent CAP Prostate Health Figure 1:. Comparing the effect of using Saw palmetto^{[2}

Table 1. Perceived beliefs about theefficacy of saw palmetto.	Yes	No	Unsure	Total
Can shrink the prostate	24 (27.3)	6 (6.8)	58 (65.9)	88
Effective at treating BPH symptoms	32 (36.4)	7 (8.0)	49 (55.6)	88
Can reduce prostate cancer risk	22 (25.0)	7 (8.0)	59 (67.0)	88
Effective at treating prostate cancer	22 (25.0)	13 (14.8)	53 (60.2)	88

WHY PROSTALEAVE IS RECOMMENDED FOR PROSTATE PROBLEMS?

PROSTALEAVE 's active ingredients include fatty acids, plant sterols, and flavonoids found in the Saw palmetto. Treatments for BPH by this herbal drug can be evaluated by their effect on symptoms such as diminished urine stream, post-void dribbling, overflow incontinence, and urinary retention, or by less useful measures such as urine flow rate, changes in prostate size, and residual volume.[1] PROSTALEAVE also contains high molecular weight polysaccharides (sugars), which can reduce inflammation or strengthen the immune system.

MECHANISM OF ACTIONS

The active part of PROSTALEAVE is the sterols and free fatty acids found in the Saw palmetto. Saw Palmetto has been shown to positively affect the structure and function of the prostate gland during the normal aging of men.

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Some of the mechanisms proposed include:

Anti-inflammatory activity¹

Studies of a hexanic extract of S. repens suggests it decreases prostaglandin and leukotriene production to inhibit the arachidonic acid cascade and decreases B lymphocyte infiltrates and interleukin (IL)-1b and tumor necrosis factor (TNF)-a levels to adjust inflammatory status and gene expression (22). In human prostate and vascular cells in an inflammatory environment, it also decreases monocyte chemotactic protein-1 production and vascular cell adhesion molecule-1 expression ⁽²⁴⁾.

In human prostate carcinoma cells, inhibitory effects on cell growth were attributed to downregulation of inflammatory-related genes and activation of nuclear factor-kappa B pathway⁽²⁵⁾.

A chalcanonol glycoside from the seeds of saw palmetto as well as sterolic derivatives have demonstrated antiproliferative effects (26).

• Blocked conversion of testosterone to dihydrotestosterone (DHT) [3,4

Saw Palmetto (Serenoa repens) inhibits the conversion of testosterone to its more active and potentially deleterious form, dihydrotestosterone (DHT), via inhibition of alpha-5-reductase. Saw Palmetto not only inhibits the binding of DHT to cellular receptors, but also has alpha 1-adrenoceptor-inhibitory properties. Alpha1-adrenoceptor antagonism may be responsible for saw palmetto's therapeutic effect in supporting the urinary tract during the normal aging of men. Saw palmetto extracts have also been found to inhibit the biosynthesis of pro-inflammatory prostaglandins and leukotrienes which may exacerbate those symptoms.

Studies with a liposterolic extract of saw palmetto berries showed that it reduced tissue uptake of both testosterone and dihydrotestosterone (DHT) by more than 40%, suggesting antiandrogenic activity ⁽¹⁵⁾. Further, the extract inhibited binding of DHT to its receptor ⁽¹⁶⁾ and blocked conversion of testosterone to DHT by inhibiting 5-alpha-reductase activity ⁽¹⁷⁾. The berries also inhibit cyclooxygenase and 5-lipoxygenase pathways, thereby preventing the biosynthesis of inflammation-producing prostaglandins and leukotrienes (18)

· Bocking of estrogen receptor activity in the prostate

Other possible mechanisms attributed to benefits in BPH include the blocking of estrogen receptor activity in the prostate as well as bladder muscle antispasmodic and anti-inflammatory activities ⁽¹⁹⁾.

Slow down the production of 5-alpha reductase enzyme

Saw palmetto seems to slow down the production of a particular enzyme called 5-alpha reductase; this enzyme converts testosterone into dihydrotestosterone (DHT) in the prostate gland.

The active compounds in saw palmetto are believed to help block the activity of 5-alpha reductase, an enzyme responsible for converting testosterone to DHT (11).

This process may help maintain testosterone levels as you get older, which may lead to improvements in body composition, libido, and mood (12).

Because DHT is also involved in the enlargement of the prostate gland, decreasing your levels of DHT by using saw palmetto may also improve prostate health and BPH (13).

Furthermore, saw palmetto may help support hair health, as DHT regulates hair growth and may contribute to hair loss and balding ⁽¹⁴⁾.