

Simplexa Prostate Complex 1

Saw palmetto: Saw palmetto (*Serenoa repens*) blocks the enzyme that converts testosterone to dihydrotestosterone (DHT). DHT is responsible for many health problems from male pattern baldness to benign prostatic hyperplasia (enlarged prostate not due to cancer). Reducing DHT levels can work to decrease benign prostatic hyperplasia by reducing the number of prostate cells and interfering with their ability to divide. Perhaps more impressively, saw palmetto and compounds extracted from it have been able to interfere with prostate cancer cells in laboratory studies.

Nettle root: Nettle root (stinging nettle; *Urtica dioica*) exerts several benefits on the male reproductive system. It is been shown to reduce prostatic hyperplasia (enlarged prostate) and to improve sperm quality. In clinical trials, nettle root more than doubled peak urine flow rates in men who had benign prostatic hyperplasia. Moreover, PSA and testosterone levels did not change, which is important for two reasons: if the supplement had elevated PSA levels, diagnosing physicians may have mistaken the change for prostate cancer and testosterone levels should be held constant throughout a man's life to ensure virility, muscle health and male secondary sex characteristics.

Beta-sitosterol: Beta-sitosterol is one of several healthy constituents of soy/soybeans. Several studies have shown that beta-sitosterol can reduce the symptoms of benign prostatic hyperplasia or BPH. For example, in a study of 200 men with benign prostatic hyperplasia, 20 mg of beta-sitosterol taken three times daily significantly increased urine flow and decreased the amount of urine remaining in the bladder after urination. Thus, 60 mg of daily beta-sitosterol improved BPH symptoms.

Pygeum africanum: *Pygeum africanum*, also known as bitter almond or African plum, has been chewed by South African tribesmen to treat "old man's disease" for decades. Old man's disease, not surprisingly, is benign prostatic hyperplasia. Several clinical trials observed what these South African tribesmen already knew: *Pygeum africanum* reduces symptoms of prostate

enlargement and benign prostatic hyperplasia. With the tribesmen may not know is that extracts of this plant improve contractility of the bladder, block testosterone's effect in the prostate gland and improve the prostate's ability to pass secretions. In fact, *Pygeum africanum* is the most commonly used medicine in France for benign prostatic hyperplasia.

Rye pollen extract: Rye pollen extract contains a substance called Cernilton, which is a registered pharmaceutical agent in various regions of the world. This extract of rye pollen was shown to decrease the urgency to urinate, post-urination dribbling, incomplete emptying of the bladder and nocturia (the need to wake up in the middle of night to urinate). Cernilton also blocks the effects of testosterone on the prostate gland which is believed to be a key step in reducing the risk of benign prostatic hyperplasia and prostate cancer. Moreover, rye pollen extract significantly inhibits the growth of prostate cancer cells.

Diindolylmethane: Diindolylmethane, better known as DIM, is found in cruciferous vegetables. DIM, along with its metabolite indole-3-carbinol (I3C), have profound healthful effects on the prostate gland. For example, DIM blocks the effects of harmful hormones (e.g., DHT) from acting on the prostate. This is important because DHT can contribute to benign prostatic hyperplasia and prostate cancer. In fact, numerous studies have shown that DIM inhibits the growth of prostate cancer cells.

Collinsonia canadensis: While it is unclear how it works, *Collinsonia Canadensis* is a natural substance that reduces congestion of glands that secrete mucus or related substances. Thus, it may help reduce congestion and improve the secretion in the prostate gland and surrounding structures. Anecdotal evidence suggests that *Collinsonia Canadensis* may help speed recovery from cystitis (bladder infection).

Zinc: Modest amounts of zinc can reduce the size of the prostate and decrease symptoms of benign prostatic hyperplasia. Moreover, zinc prompted prostate cancer cells to "commit suicide" or programmed cell death, also called apoptosis. High doses of zinc taken daily, specifically 100 mg or more over a period of 10 years, may

increase the risk of prostate cancer. Simplexa Prostate Complex 1 has been formulated to provide a helpful, but not harmful, amount of zinc daily.

Selenium: Selenium reduces symptoms of benign prostatic hypertrophy and prostate specific antigen (PSA) levels in men. More clinical trials are needed to determine its effect on prostate cancer prevention, however.

Vitamin E: Vitamin E consumption, specifically supplementation with the D-alpha tocopheryl form of vitamin E, is inversely associated with the incidence of prostate cancer. In other words, men who consumed more vitamin E (D-alpha tocopheryl) had lower rates of prostate cancer while men who consumed less vitamin E had higher rates.

Synergistic effects: Two of the more common and feared consequences related to the prostate gland are benign prostatic hyperplasia and prostate cancer. The former can greatly interfere with the quality of life while the latter can end life. Simplexa Prostate Complex 1 has been formulated to help protect the prostate gland from both of these possible outcomes.

An enlarged prostate can make urination difficult. Benign prostatic hyperplasia can interfere with the flow of urine and prevent the urinary bladder from fully emptying, making men feel as if they have to urinate more frequently and even waking them up at night to urinate. Saw palmetto, *Pygeum africanum*, nettle root, zinc, rye pollen extract and beta-sitosterol work by similar but probably distinct mechanisms to reduce the size of and urinary flow through the prostate gland, thereby reducing symptoms of BPH.

Saw palmetto, nettle root, rye pollen extract, vitamin E (D-alpha tocopheryl), DIM/I3C and modest amounts of zinc either inhibit or actively destroy prostate cancer cells through various mechanisms. Therefore, these substances taken together may have an additive or synergistic effect against the development of prostate cancer.