Saw Palmetto (Serenoa repens)

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Modern usage of saw palmetto is focused on BPH (benign prostatic hyperplasia). Benign prostatic hyperplasia is one of the most common medical conditions in middle-aged and elderly males, with an incidence of approximately 50-60 percent in men age 40 to 60, and greater than 90 percent in men over 80. However, there are some cases that begin as early as the late 20s, and may have an incidence rate of 10 percent at that age.

This non-malignant enlargement of the prostate which is caused by hormonal processes and/or imbalances within the prostate forces most of the growth of the prostate gland inward, compressing the urethra and causing the typical urinary symptoms characteristic of the disease, including: decreased force and strength of the urine stream, urinary hesitancy, urgency, frequency, post-void dribbling, incomplete emptying of the bladder, painful urination, and nighttime urination.

Testosterone is converted in prostate cells to dihydrotestosterone (DHT), catalyzed by the enzyme 5-alpha-reductase (5-AR). DHT binds to androgen receptors in the prostate cells, stimulating cellular growth and division.
In BPH tissue, 5-AR levels are higher than in tissue not affected by BPH. The presence of DHT may also stimulate 5-AR activity, worsening the problem by stimulating more DHT.

Standardized saw palmetto extract has been found to be a potent inhibitor of 5-AR, resulting in decreased DHT. Saw palmetto also inhibits the binding of testosterone and DHT to androgen receptors.

Another component of BPH is inflammation within the prostate gland. A standardized saw palmetto has been shown to inhibit 5-lipoxygenase and thus reduce pro-inflammatory chemicals such as arachidonic acid metabolites leukotriene B4 (LTB4) and 5-hydroxyeicosatetraenoic acid (5-HETE).

Numerous human trials report that saw palmetto improves symptoms of benign prostatic hypertrophy (BPH) such as nighttime urination, urinary flow, and overall quality of life. The effectiveness may be similar to the medication finasteride (Proscar®) with fewer side effects. Although the quality of these studies has been variable, overall they suggest effectiveness. Saw palmetto has not been thoroughly compared to other types of drugs used for BPH, such as doxazosin (Cardura®) or terazosin (Hytrin®).

The dose of standardized saw palmetto used in research is 85 - 95% fatty acids and sterols, at a dose of 160 mg twice per day.

Is saw palmetto just for men? Not exactly, many medical doctors that are aware of the clinical research on saw palmetto are employing it in PCOS cases (polycystic ovarian syndrome). One of the most troubling symptoms of women with PCOS is hirsutism (too much hair, in the wrong places). Hirsutism is thought to be mostly due to excessive levels of androgenic hormones. Examples of androgens are testosterone, androstenedione, and DHEA. DHT is the hormone in your skin that stimulates hirsutism, which is male pattern hair growth. If you can reduce DHT, you may be able to reduce hirsutism or male pattern hair loss in women.

Traditional indications for the use of Saw palmetto include: cystitis, chronic bronchitis, asthma, diabetes, dysentery and indigestion. The berries have also been thought to be an aphrodisiac. It has been suggested that saw palmetto may block some effects of testosterone and therefore reduce male pattern hair loss, similar to the medication finasteride (Propecia®). More studies are necessary to evaluate saw palmetto for hair loss.

There are no known cases of toxicity.

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