

## Supplement Sampler

### Saw Palmetto (*Serenoa repens*)

#### Best Indications

Mild to moderate male lower urinary tract symptoms (LUTS) such as nocturia, incomplete emptying, hesitancy, weak stream, frequency, urgency, etc. related to benign prostatic hypertrophy (BPH).

#### Mechanism of Action

The lipid fraction of the ripe saw palmetto fruit seems to contain its active ingredient that inhibits 5 alpha-reductase types 1 and 2 and prevents conversion of testosterone to dihydrotestosterone. It does not seem to affect overall prostate size but appears to shrink the inner prostatic epithelium. It also may inhibit fibroblast growth factor and epidermal growth factor and stimulate apoptosis, further slowing prostate cell proliferation. Inflammation appears to contribute to BPH; saw palmetto has also been shown to decrease several inflammatory markers such as tumor necrosis factor-alpha, interleukin-1beta, lipoxigenase and cyclooxygenase.



#### Evidence

A 2009 Cochrane Update reviewed 30 randomized trials including 5222 subjects (this added 2053 subjects and 9 trials from their 2002 review) and concluded that there was no significant difference between *Serenoa repens* and placebo for the treatment of urinary symptoms consistent with BPH (1). However, in a randomized trial of 1098 patients comparing it with finasteride, *Serenoa repens* was found to be as effective without the side effects (2).

1. Tacklind J, MacDonald R, Rutks I, Wilt T: *Serenoa repens* for benign prostatic hyperplasia. *Cochrane Database of Systematic Reviews, Issue 3, 2009*.
2. Carraro JC, et al: Comparison of phytotherapy (Permixon) with finasteride in the treatment of benign prostate hyperplasia: A randomized international study of 1098 patients. *Prostate* 29:231, 1996.

#### Dosage

320mg daily (or 160 mg BID); therapeutic benefit takes about 8 weeks to appear.

#### Side Effects

Orally and in single ingredient products, the reported adverse effects of saw palmetto are generally mild and comparable to placebo. The most common reported side effects include dizziness, headache, and gastrointestinal complaints such as nausea, vomiting, constipation, and diarrhea. There was one case of excessive intraoperative bleeding that normalized once saw palmetto was discontinued (possibly due to antiplatelet activity); no reports have been made of spontaneous bleeding.



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### **Cost**

\$15-\$25 for a 4 month supply compared to finasteride which is \$3/day or \$360 for a 4 mth supply.

### **Clinical Bottom Line**

Saw palmetto is an inexpensive and likely safe option for treatment of LUTS due to BPH with efficacy that seems to be similar to finasteride with fewer sexual side effects.

*Brought to you by Greta Kuphal, MD, and your colleagues in the UW Department of Family Medicine Integrative Medicine Program.*

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