

### **Bustin Broscience- Saw Palmetto**

For years doctors and so called experts have recommend the use of saw palmetto for men who have urinary dysfunction symptoms associated with the enlargement of the prostate gland and BPH (Benign Prostatic Hyperplasia). An estimated over 2 million men in the United States and many more worldwide are believed to be supplementing with saw palmetto in hopes of helping treat urinary dysfunction symptoms and BPH. However, there is increasing evidence that taking saw palmetto for treatment of the aforementioned conditions is ineffective.

According to a year-long study that was done by Stephen Bent, MD, a staff physician at the San Francisco VA Medical Center, and Andrew Avins, MD, MPH, of the Northern California Kaiser Permanente Division of Research, Saw Palmetto is not as effective as previously thought. *Bent et al. (2006)*:

“We found that saw palmetto was not superior to placebo for improving urinary symptoms and objective measures of benign prostatic hyperplasia. The confidence intervals around the finding of no effect were narrow, excluding clinically important effects. For example, the 95 percent confidence interval for the difference in the change in the AUASI score between groups (-0.93 to 1.01) is consistent with only a 1-point improvement in the AUASI score. Previous research has suggested that a clinically meaningful change in symptoms of benign prostatic hyperplasia requires a change in the AUASI score of at least 3 points. Also, all symptomatic measures (including the AUASI and the BPH Impact Index) and all objective measures (including urinary flow rates, residual volume after voiding, and prostate size) were consistent in showing no evidence of an effect. The subgroup analyses indicated that there was no benefit among patients

with either more or less severe symptoms or among patients with either small or large prostate glands.” (Bent et al., 2006).

In other words, they found no discernable difference between the placebo and the herb extract in specific groups of patients with less/more symptoms, large and small prostates as well. Although the present study fails to highlight any clinical benefit associated with saw palmetto, it is possible for other groups of patients to respond in different or rather unique ways to the extract (Bent et al., 2006). They go on to contend that the reasoning for the discrepancy between the findings of the study they did and previous findings is that several factors can explain the discrepancy between our negative study and the summary of prior evidence:

“We measured the adequacy of blinding, and we found that blinding was effective, with a similar percentage of men in the saw palmetto and placebo groups reporting that they believed they were taking the active extract. Since other studies did not assess the adequacy of blinding, and since saw palmetto has such a strong, pungent odor, many prior studies may not have achieved adequate blinding. Inadequate blinding has the potential to reduce the response in men who are given placebo (who may be aware they are taking placebo), artificially increasing the comparative efficacy of saw palmetto.

It is also possible that the participants in this study had attributes that made them less likely to have a response to saw palmetto. However, the baseline characteristics of participants in our trial with regard to age, symptom scores, prostate volume, and peak urinary flow rate were similar to those of men in previous trials of herbs or pharmaceutical agents for benign prostatic hyperplasia.

The level of active ingredient in the extract may not have been sufficient to produce a measurable effect. We cannot completely address this possibility, because the active ingredient in saw palmetto, if one exists, is not known. However, prior in-vitro studies suggest that the active ingredient is contained within the fatty acid fraction. Although there are no widely accepted guidelines on the contents of saw palmetto extract, authorities have recommended that the extract contain either 80 to 95 percent combined fatty acids and sterols or 85 to 95 percent fatty acids and greater than 0.2 percent sterols. The U.S. Pharmacopeia states that the product should contain 70 to 95 percent fatty acids and 0.2 to 0.5 percent sterols. The extract we used (which, on separate measurements, had 90.7 to 92.1 percent fatty acids and 0.33 percent sterols) meets all the criteria proposed by the various authorities and was selected by an expert advisory committee chartered by the NCCAM.

The saw palmetto extract we used also had characteristics similar to those of other commonly used products in the United States. A reference laboratory that provides Web-based information tested the majority of saw palmetto products available in the United States and found that 17 of 22 tested products had fatty acid levels of 85 to 95 percent and sterol levels of more than 0.2 percent. The saw palmetto extract in our study had the same range of values for these ingredients and is therefore similar to the majority of currently available products. In summary, we found that 160 mg of saw palmetto given twice daily for one year does not improve lower urinary tract symptoms caused by benign prostatic hyperplasia.”

Due to the 5 alpha reductase (or 5-AR, an enzyme that allows for the conversion of testosterone to DHT)-inhibiting properties of saw palmetto, healthy men who have non-cancerous enlarged prostates should steer clear of saw palmetto because saw palmetto works in a manner similar to chemotherapy drugs by destroying healthy prostate cells along with mutated ones. In other words, if you have a non-cancerous enlarged prostate there is the potential to increase your chances of developing prostate cancer (Trabucco, n.d.). Since saw Palmetto can act as a 5-alpha reductase inhibitor, thereby potentially interfering with PSA levels in men and decrease prostate cancer detection, it is imperative that men get a baseline PSA level (as is recommended by the FDA for Finasteride, but not for the unregulated use of Saw Palmetto). Many men self-medicate themselves with this herb may not be aware of this detrimental effect and in fact are hurting themselves more than helping.

#### Using Saw Palmetto with The ONE™ ...Just Say No!

The ONE™ is a revolutionary new anabolic product from Applied Nutraceuticals that can completely alter your physique in as little as 4 weeks. The One™ is a completely new and novel anabolic compound that is an oral prohormone of dihydrotestosterone (DHT), a compound that produces effects 3 to 5 times more potent than testosterone (Applied Nutraceuticals, 2009). Many men are under the common impression and misconception that DHT and its derivatives can cause adverse effects including hair loss, acne and prostate problems. However, the truth of the matter is that estrogen, and contaminants exerting estrogen-like effects, are actually at fault in this situation, not DHT. A great deal of recent research has addressed this discrepancy, as exemplified by this excerpt from a 2008 study by Lynn Hinderliter CN, LDN:

“Some researchers are seeing a connection between prostate problems and estrogen-like compounds in pesticides, and experiments with animals fed

hormone-containing diets confirm this as a possibility. Recent studies confirm that a common organochlorine contaminant hexachlorobenzene (HCB) disrupts normal development of the male reproductive tract by interfering with normal hormonal action. Many other contaminants share the same mechanisms of action of HCB and thus are also implicated by these results.” (¶ 5).

According to Hinderliter, environmental estrogens and estrogen-like contaminants can lead to prostate issues, and lead to disruption in normal male hormonal function.

The ONE™ addresses the problem of estrogen by modulating estrogen levels and acting as an aromatase inhibitor, which prevents androgens from converting into estrogens. The One™ can also significantly lower SHBG (a binding hormone that reduces the amount of free testosterone) levels, allowing for more active product to reach skeletal muscle (Applied Nutraceuticals, 2009).

The active ingredient in ONE™ is a carefully derived DHT analog that has been formulated to have very limited androgenic potential; which is why it has minimal action on the prostate and hairline. Since The ONE does not convert to estrogen, any effects on the prostate are minimized. However, many opt to use saw palmetto as a support supplement when they decide to supplement with The ONE™ as they believe they are providing themselves an extra level of protection – when in fact they are undermining their own efforts.

The main reason not to supplement with saw palmetto when using The ONE™ is that saw palmetto is an anti-androgen, and binds antagonistically to the androgen receptor. This blocks the ability of The ONE™ to bind effectively to the androgen receptor and in essence, the

saw palmetto displaces other androgens (including DHT and its analogs) which diminishes the ability of The ONE™ to fully exert its effects. Another reason to avoid saw palmetto is that it can decrease your endogenous testosterone and DHT levels - therefore limiting your efforts for muscle growth even further. It has also been suggested that it can increase estradiol concentrations, which can lead to a condition called gynecomastia – or male breast tissue enlargement.

In summary, despite earlier evidence that saw palmetto could potentially improve prostate health, there is increasing new evidence to the contrary. Those findings combined with the antagonistic properties it has with The One lead us to strongly recommend against the use of saw palmetto, particularly while taking The One.

#### References

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