



Comparison of the Antioxidant effects of lipid extracts of *Roystonea regia* (D-004) and Saw Palmetto on Blood Oxidative Variables of Healthy Men

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SUMMARY. D-004, a lipid extract of *Roystonea regia* fruits that prevents testosterone-induced prostate hyperplasia in rodents, and saw palmetto (SP) lipid extract, used to treat benign prostate hyperplasia, have been shown antioxidant effects. This randomized, double-blind study compared their antioxidant effects in forty healthy men randomised to D-004 or SP (320 mg/day) capsules for 8 weeks. D-004 significantly ($p < 0.001$) reduced plasma malondialdehyde (MDA) (32.7 %), sulphhydryl groups (SH-G) (24.6 %) and ($p < 0.01$) total hydroxyperoxides (TOH) (26.5 %) values and increased ($p < 0.001$) total antioxidant status (TAS) (44.1 %) and catalase (CAT) (100.0 %) activity. Treatment with SP lowered ($p < 0.001$) MDA (26.6 %), SH-G (24.1 %), ($p < 0.01$) TOH (26.3 %) values, and raised ($p < 0.001$) TAS (57.4 %) and ($p < 0.01$) CAT (85.7 %) activity. Both treatments were similarly effective and well tolerated. Concluding, D-004 and SP (320 mg/day) for 8 weeks similarly reduced plasma lipid peroxidation (MDA, TOH) and protein oxidation (SH-G) markers, increased TAS and CAT activity and were well tolerated in healthy men.

KEY WORDS: Antioxidant, Benign prostate hyperplasia, D-004, Lipid peroxidation, *Roystonea regia*, Saw palmetto.

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