POLYPHENOLIC BOTANICALS-APPLICATIONS FOR PROSTATE HEALTH

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Polyphenolic compounds found in plants are utilized currently for improving prostate health. The botanicals with the highest recognized profiles are Resveratrol and the isoflavonoids. Prostate health is compromised with aging, especially beginning in the mid-40s, when testosterone levels decline and estrogenic hormonal actions increase along with enhanced expression of the prostatic 5α-reductase enzyme that result in prostate enlargement commonly known as benign prostatic hyperplasia (BPH). There is a linear increase in BPH incidence with increasing age in men over 60 years old. Approximately 1 in 5 men with BPH had a clinical event (prostatectomies), within 1 year of initiating treatment for BPH. The symptoms of BPH include nocturia, incomplete emptying, urinary hesitancy, weak stream, frequency and urgency that negatively impact the quality of life. Current pharmaceuticals are somewhat effective, but can have serious side effects. Interest in complementary and alternative medicines (CAM) for BPH has increased during the last two decades. CAM agents include polyphenolic compounds such as Resveratrol and the isoflavonoids. Resveratrol is effective in vitro, but, in vivo administration presents efficacious challenges. Genistein was first thought to be responsible for improved prostate health, however, since the equal hypothesis was proposed in the late 1990s, there has been increased focus on this isoflavonoid molecule. This presentation will briefly review Resveratrol and some isoflavonoid molecules where clinical studies have shown improvement of BPH symptoms in men using standardized laboratory biomarkers and survey indexing parameters. Clearly there is an opportunity for an efficacious and cost-effective approach for the treatment of BPH with botanicals.

Biography

Lephart has a Ph.D. in Physiology from the University of Texas Southwestern Medical Center, Dallas, Texas, USA. He is Professor of Physiology/Developmental Biology and Neuroscience in the College of Life Sciences at Brigham Young University, Provo, Utah, USA. His research interests include: Estrogen Production via Aromatase Cytochrome P450 and The Biochemistry and Endocrinology of 5-Reductase. His main research interests examine Polyphenolic Molecules as Anti-aging agents in Dermal, Neuro-Endocrine and Reproductive areas with over 100 peer-reviewed publications.

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