Steroid Hormone Effects of Natural Products and Nutraceuticals,
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Over the past several years, there has been an increasing trend in the use of complementary and alternative therapies to treat and prevent hormonally-dependent conditions. We have therefore undertaken this study to determine whether several of these natural products and nutraceuticals, commonly taken for hormone-related effects do possess steroid hormone activity. Twenty natural products and nutraceuticals were assessed for estrogenic, progestational and androgenic activities using an in vitro tissue culture system. The estrogen-regulated protein pS2 and prostate specific antigen (PSA), controlled by androgens and progestins, were quantitated, using ELISA-type immunosassays, as markers of agonist and antagonist activity. Four of the products tested, two isoflavone preparations, Promensil™ and Estro-Logic™, and chamomile and grapeseed extracts, were found to have estrogen agonist activity, with the latter two also demonstrating progestational activity. Several of the products tested showed antagonistic activity, including anti-estrogenic activity by Prostate-Ease, wild yam root and dong quai, and anti-androgenic activity by dong quai, Promensil™ and rosehips. We conclude that several products do have steroid hormone activity. Further research into their benefits in managing or preventing hormonal diseases is needed.