Integrative Cancer Therapies, Vol. 6, No. 2, 130-145 (2007)
DOI: 10.1177/1534735407301441

Chemopreventive Efficacy of Silymarin in Skin and Prostate Cancer

Gagan Deep, PhD

Department of Pharmaceutical Sciences, School of Pharmacy

Rajesh Agarwal, PhD

Department of Pharmaceutical Sciences, School of Pharmacy, Rajesh.Agarwal@UCHSC.edu , University of Colorado Cancer Center, University of Colorado Health Sciences Center, Denver, Colorado

Prevention and therapeutic intervention by phytochemicals are newer dimensions in the arena of cancer management. In this regard, the cancer chemopreventive role of silymarin *(Silybum marianum)* has been extensively studied and has shown anticancer efficacy against various cancer sites, especially skin and prostate. In skin cancer, silymarin treatment inhibits ultraviolet B radiation or chemically initiated or promoted carcinogenesis. These effects of silymarin against skin carcinogenesis have been attributed to its strong antioxidant and anti-inflammatory action as well as its inhibitory effect on mitogenic signaling. Similarly, silymarin treatment inhibits 3, 2-dimethyl-4-aminobiphenyl—induced prostate carcinogenesis and retards the growth of advanced prostate tumor xenograft in athymic nude mice. In prostate cancer, silymarin treatment down-regulates androgen receptor—, epidermal growth factor receptor—, and nuclear factor-□B— mediated signaling and induces cell cycle arrest. Extensive preclinical findings have supported the anticancer potential of silymarin, and now its efficacy is being evaluated in cancer patients.

Key Words: chemoprevention • antioxidant • anti-inflammatory • carcinogenesis • cell cycle • hepatoprotectant

>

Formula del Silymarin