

Phytoestrogens and Hepatocellular Carcinoma Chemoprevention

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Abstract

Hepatocellular carcinoma (HCC) is the commonest primary malignant cancer of the liver and the third leading cause of cancer mortality worldwide. Statistically liver cancer is the fifth most common cancer in men and the 7th most common cancer in women. The major common risk factors for hepatocellular are hepatitis B (HBV) and hepatitis C viruses (HCV). [Phytoestrogens](#) are natural plant substances that are structurally or functionally similar to estradiol. The three main classes are isoflavones, coumestans, and lignans. Major source of phytoestrogen include, legume seeds (beans, peas), flax seed and especially soy products. [Phytoestrogens](#) have anticarcinogenic potential, but they have also significant estrogenic properties. Interest in phytoestrogens has been fueled by epidemiologic data that suggest a decreased risk of liver cancer in women from countries with high phytoestrogen consumption. In this review, the role of phytoestrogens and consumption of phytoestrogen-rich foods such as soy containing isoflavones, coumestans, and lignans for the prevention of hepatocellular carcinoma is reviewed.