Silybin is a phytoestrogen and flavonoid originally found in the seeds of the milk thistle plant (*Silybum*). Silybin exhibits anti-diabetic, anti-inflammatory, anti-angiogenic, anticancer chemotherapeutic, and chemopreventive activities. In cellular and animal models of hepatocellular carcinoma, silybin increases expression of TRAIL and DR-5, activates caspase signaling, and decreases tumor growth and inflammatory cytokine release. In animal models of diabetes, silybin decrease Hb1Ac levels as well as serum triglycerides, cholesterol, and glucose in pancreatic β cells. Additionally, silybin inhibits IL-1β-induced pro-inflammatory cytokine expression and suppresses translocation of NF-κB in vitro. In animal models, this compound suppresses expression of HIF-1α and VEGF, decreases microvessel density, and delays UV-induced carcinogenesis.

**References**


