Chrysin is a flavone/flavonoid initially found in *Passiflora*, *Oroxylum*, and *Pleurotis*; it is also a byproduct found in propolis. Chrysin exhibits anti-estrogenic, anti-inflammatory, anxiolytic, neuroprotective, cognition enhancing, antioxidative, anti-metastatic, anticancer chemotherapeutic, and chemopreventive activities. In vitro, chrysin may inhibit aromatase. In macrophages, chrysin inhibits LPS-induced expression of COX-2 and activity of NF-IL-6. This compound displays anxiolytic benefit in animals undergoing the elevated plus maze. In vivo, chrysin increases levels of catalase, superoxide dismutase, and glutathione, decreases activation of NF-κB and levels of TNF-α, IL-1β, IL-6, and caspase 3, and increases body weight and cognitive function. Chrysin inhibits DEN-induced renal carcinogenesis in vivo and decreases expression of VEGF, cellular metastasis, and breast cancer cell survival in vitro and in vivo. Additionally, chrysin inhibits HDAC2 and HDAC8.