

Tensof

St. John's Wort is a golden yellow perennial flower that secretes a red liquid when pinched. This plant has been used medicinally for over 2,000 years. Ancient Greeks believed that its odor repelled evil spirits. The primary action of St. John's Wort extract is antidepressant. Some references refer to relaxant effects in relation to the Commission E approval for anxiety and nervous unrest, but this may only be in the context of the overall antidepressant activity or in small studies on sleep continuity or resting EEG. Other actions include improved mental performance possibly resulting from improvement of depressed states. St. John's Wort does not appear to change alertness or have sedative effects; there may be some additional central nervous system effects, again related to improvement of depression including improvement of concentration, memory and receptivity. St. John's wort has antibacterial properties and may also help fight inflammation that is at the root of most diseases. When applied topically, it relieves symptoms associated with minor wounds and skin irritations, working as a natural treatment for eczema, a home remedy for burn relief and a way to naturally treat hemorrhoids. St. John's wort shows anti-inflammatory properties due to its inhibitory effects on pro-inflammatory genes like cyclooxygenase-2, interleukin-6 and inducible nitric-oxide synthase; these genes play a critical role in chronic inflammatory diseases. Extracts of St. John's wort have been used for thousands of years to treat cuts and abrasions. Its usefulness in reducing inflammation is well-known and appears to be related to its ability to serve as an antibacterial agent. Because of its positive effects on mood, St. John's wort has been used to alleviate and naturally remedy PMS symptoms, such as depression, chronic fatigue and hormonal imbalance. St. John's wort uses include being tested as an herbal remedy that relieves the psychological and vegetative symptoms of menopause. Pharmacology/Mechanism of Action St. John's Wort extract binds with high affinity at GABAA, GABAB, adenosine, benzodiazepine, inositol, triphosphate and MAO-A & MAO-B receptors. This may inhibit uptake of several neurotransmitters, neuropeptides & neurosteroids. May also inhibit 5-hydroxytryptamine (5HT serotonin) receptor expression resulting in inhibition of 5HT reuptake. One indirect study based on changes in hormone levels suggests that antidepressant effects might be mediated mainly through changes in serotonin and dopamine neurotransmission but not noradrenaline in human. Hyperforin from St. John's Wort leads to elevation of Na⁺, thus explaining its apparent effect on serotonin uptake inhibition into platelets and synaptosomes and the non-selective profile on many neurotransmitter transport systems which are driven by Na⁺ gradient membranes. Hyperforin induces CYP3A4 expression in human hepatocytes and activates the steroid X receptor, possibly suggesting a mechanism for drug interactions.