

## **St. John's Wort (*Hypericum perforatum*)**

St. John's Wort has become popular again as an antidepressant. It is the number one treatment in Germany and has been extensively studied by Commission E, the scientific advisory panel to the German government. It contains several chemicals, including hypericin, hyperforin, and pseudohypericin, which are thought to be the major sources of antidepressant activity. In several studies of laboratory animals and humans, one or more of the chemicals in St. John's wort appeared to delay or decrease re-absorption of the neurotransmitters dopamine, norepinephrine, and serotonin by nerve cells.

Neurotransmitters are chemicals that carry messages from nerve cells to other cells. Ordinarily, once the message has been delivered, neurotransmitters are re-absorbed and inactivated by the cells that released them. Chemicals in St. John's wort may keep more of these antidepressant neurotransmitters available for the body to utilize. Multiple studies have shown that St. John's wort may be effective in relieving mild to moderate depression, although maximum antidepressant effects may take several weeks to develop.

St. John's Wort is an MAO inhibitor and should not be used with alcohol and some other foods.

St. John's wort has also been studied for the treatment of other emotional disorders such as anxiety, obsessive-compulsive disorder (OCD), menopausal mood swings, and premenstrual syndrome. In laboratory studies, it has shown some effectiveness for lessening the symptoms of nicotine withdrawal and for reducing the craving for alcohol in addicted animals. It is believed that chemicals in St. John's wort may act like other chemicals that are associated with relieving emotional conditions.

Possible antiviral effects of St. John's wort are being investigated for the treatment of HIV/AIDS, hepatitis C, and other viral illnesses. It is thought that hypericin, pseudohypericin, and other chemicals in St. John's wort may stick to the surfaces of viruses and keep them from binding to host cells. Another theory is that St. John's wort may contain chemicals that interfere with the production or release of viral cells. This antiviral activity is enhanced greatly by exposure to light. However, the doses needed for active antiviral effect from St. John's wort may be so high that unbearable side effects may limit its usefulness as an antiviral.

It has also been used to treat hypothyroidism and a salve made with the extract can be used topically to treat bruises, burns, insect bites and scabies.