



Minnesota Department of Health
Protecting, maintaining and improving the health of all Minnesotans



[MDH HOME](#) · [MAIN CATEGORIES](#) · [ABOUT US](#) · [LIBRARY](#) · [NORTHSTAR](#)

Health Technology
Advisory Committee

St. John's Wort Questions and Answers

- [Home](#)
- [Publications](#)
- [Links](#)
- [Search](#)

March 2001

What You Should Know about St. John's wort

Herbal products have been in use worldwide for centuries. About 25 percent of the U.S. adult population uses some type of herbal supplement, such as St. John's wort.¹ Advertising and the trend toward self-medication have increased their use over the last few years. This increased use has raised questions about herbal supplements and their effectiveness, safety, quality, purity, uses and strength.

Q: What is St. John's wort?

St. John's wort (botanical name, *Hypericum perforatum*) is a flowering plant, which likes sunny areas and is commonly found along roadsides or railroad beds. Extracts of the plant are available in tea, pills or capsules, balm or ointment, and in tincture form.² St. John's wort does not need a prescription and can be found at retail, food, or discount stores.

Q: Is St. John's wort a prescription drug?

No. Herbal supplements are classified as dietary supplements, and therefore, are regulated by the FDA under the Dietary Supplement Health and Education Act of 1994 (DSHEA). This act requires the FDA to follow different rules for dietary supplements than those used for prescription drugs.³ For this reason, a person should discuss the use of St. John's wort with their physician or pharmacist prior to its use. A physician or pharmacist can alert patients to potential drug interactions.

Q: What is St. John's wort currently used for and how does it work?

Germany and other European countries utilized St. John's wort in the treatment of mild to moderate depression.⁴ The use of St. John's wort for the treatment of depression has made it the number five selling herb in Europe and one of the top 10 herbs used in the United States and Minnesota.^{5,6}

Studies have shown that St. John's wort extracts contain several active

ingredients that affect the brain.^{7,8} However, it is not known which ingredients, or how these ingredients create the antidepressant effect. Medical researchers believe that depression is caused by a biochemical imbalance or a combination of biochemical imbalances that affect communication between brain cells. There are several compounds found in St. John's wort that may cause better cell communication.^{8,9}

Q: Is St. John's wort effective?

A number of studies^{4,9,10,11} suggest St. John's wort is effective for the treatment of mild to moderate depression. However, these studies had a small number of participants, were short in length, and did not include a standard dose for St. John's wort. Due to the popularity of St. John's wort, the National Institute of Mental Health has begun a 3-year study to determine its effectiveness, occurrence of side effects and safety. Results from this study are not expected until the year 2003.¹²

Q: What are the dangers of taking St. John's wort?

St. John's wort has not been thoroughly tested for safety, side effects, and long-term toxicity. There is also a shortage of information on how St. John's wort works with nonprescription drugs, prescription drugs, and other herbal products. St. John's wort has not been proven safe for certain groups of people, such as pregnant or nursing women, and elderly patients with liver damage, heart problems, or other serious illnesses. Due to a lack of information, these persons should not use St. John's wort.

Side effects

The most commonly reported side effects related to the use of St. John's wort include: gastrointestinal symptoms, dry mouth, nausea, allergic reactions, fatigue, dizziness, restlessness and an increased sensitivity to sunlight.¹³ Light skinned people or individuals who are sensitive to the sun should wear clothing that covers the skin and use sunscreen while using St. John's wort.

Interactions

Because St. John's wort has not been studied like prescription drugs, there is a shortage of information about its interactions with prescription drugs, nonprescription drugs, and other herbal products. Drug interactions are being reported that show dangerous interactions do exist.

A letter from the Food and Drug Administration (FDA) advised health care professionals that patients who are currently taking indinavir and cyclosporin should not take St. John's wort.¹⁴ Use of St. John's wort has been reported to decrease the amount of drug in the blood.¹⁵

St. John's wort also decreases digoxin blood concentrations. Therefore, persons using digoxin should not use St. John's wort.

Birth control pills may become less effective when taken with St. John's wort. The FDA advises caution when using St. John's wort and birth control pills since an unplanned pregnancy may occur.

Serotonin syndrome, a potentially fatal side effect, can result when more than one antidepressant is taken at the same time.¹⁶ Therefore, St. John's wort should not be used with other antidepressants.

St. John's wort may interact with over-the-counter medications.^{4,17,18} Check with your physician or pharmacist before taking any over-the-counter medications if you are taking St. John's wort.

Herbal products may contain toxic materials. It has been shown that up to 60 percent of the herbal products imported from Asia contained heavy metals such as lead, mercury, and arsenic.¹⁹

Combined use of different herbal products has caused serious problems, such as kidney failure.¹⁹

Q: How much St. John's wort should I take?

The daily amount of St. John's wort that should be taken depends upon the product. Product labeling suggests a daily dose of 900 mg; 300 mg three times a day for a St. John's wort product containing a hypericum concentration of 0.3%. However, carefully note the potency of the product being used. It is important to read the product label and if it is unclear or you have questions consult your pharmacist or physician.

Q: Why is it popular?

Most people use St. John's wort after a self-diagnosis because it is easy to obtain, requires no prescription, and is seen as "natural" and therefore safe and harmless. It has gained popularity for the treatment of depression since it appears to have fewer side effects than other prescription antidepressants. Since St. John's wort has not been studied thoroughly, it may appear to have fewer side effects than prescription drugs. However, this may not be true.

Q: Is St. John's wort covered by my health plan?

Dietary supplements are not a covered benefit.

Q: Are there other concerns?

The use of St. John's wort for depression is not a proven treatment. If used, it should only be used in the treatment of mild to moderate depression and not severe depression. Persons who make a self-diagnosis are at risk because serious depression that is not properly treated or identified can become unbearable and lead to suicide.

All persons should consult their physician prior to taking St. John's wort.

Consumers should be informed about possible side effects and interactions that can occur with St. John's wort as well as other herbal supplements.

People who are currently taking digoxin, indinavir, or cyclosporin should not take St. John's wort. St. John's wort decreases the concentration of these drugs in the blood. Digoxin, is a heart medication; indinavir (Crixivan®), is an HIV drug; and cyclosporin is used to suppress transplant rejection.

St. John's wort may interfere with the proper functioning of other prescription and nonprescription medications.

Caution should be used when using both St. John's wort and birth control pills. Birth control pills may become less effective and pregnancy may occur.

Caution should be exercised whether using herbal supplements or prescribed drugs.

Additional Sources of Information

Government web sites:

U.S. Food & Drug Administration <http://www.fda.gov>

National Institute of Health, Office of Alternative Medicine
<http://nccam.nih.gov/>

U.S. Dept. Health and Human Services <http://www.healthfinder.gov>

National Center for Complementary and Alternative Medicine
<http://www.nccam.nih.gov>

Medical Information web sites:

Search Medical Libraries
http://directory.netscape.com/Top/Reference/Libraries/Medical_Libraries

Safemedication.com <http://www.safemedication.com>

Familydoctor.org <http://www.medicinenet.com>

Mayo Clinic <http://www.mayohealth.com>

Medscape <http://www.medscape.com>

Healthon/WebMD <http://www.webmed.com>

AARP Pharmacy Service <http://www.rpspharmacy.com>

RxList <http://www.rxlist.com>

Thrive on Line <http://thriveonline.oxygen.com> medical/library/herbs

References

1. The Medical Letter. St. John's Wort. The Medical Letter on Drugs and Therapeutics. 11-21 1997;39:1014:107-108.
2. Upton R. St. John's Wort: Hypericum perforatum. American Herbal Pharmacopoeia and Therapeutic Compendium. 07-1997;1:July:3-32.
3. 103rd Congress. Dietary Supplement Health and Education Act of 1994. 1994;
4. Josey ES, Tackett RL. St. John's Wort: a new alternative for depression? International Journal of Clinical Pharmacology and Therapeutics. 1999;37:3:111-119.
5. Plotnikoff G, George J. Herbalism in Minnesota: What Should Physicians Know? Minnesota Medicine. 05-1999;82:May:1-29.
6. Foster S. 101 Medicinal Herbs: An Illustrated Guide. 11-1998;192-193
7. Young Physicians Section of the AMA. American Medical Associations Young Physicians Section (YPS) Report for June 17-19,1999. 10-26-1999;
8. de Smet P. St. John's wort as an antidepressant. British Medical Journal. 08-03-1996;313:241-242.
9. Miller ND. St. John's Wort (Hypericum perforatum): Clinical Effects on Depression and Other Conditions. Alternative Medicine Review. 1998;3:1:18-26.
10. Linde K, Ramirez G, Mulrow C, et al. St. John's wort for depression--an overview and meta-analysis of randomized clinical trials. British Medical Journal. 7-03-1996;313:253-258.
11. Deltito J, Beyer D. The scientific, quasi-scientific and popular literature on the use of St. John's Wort in the treatment of depression. Journal of Affective Disorders. 1998;51:345-351.
12. NIH. Serotonin Transporter Availability and Mood State in Normal Volunteers Taking Hypericum Perforatum (St. John's wort). Available at: http://clinicalstudies.info.nih.gov/detail/A_1999-M-0151.html

Accessed on: 08-09-2000.

13. Rey J, Walter G. Hypericum perforatum (St. John's Wort) in depression: pest or blessing? *Alternative Medicine*. 12-1998;169:583-586
14. Food and Drug Administration (FDA). FDA Public Health Advisory: Risk of Drug interactions with St John's Wort a Dietary Supplement Indinavir And Other Drugs. Available at: <http://www.fda.gov/cder/drug/advisory/stjwort.htm> Accessed on: 12-07-2000.
15. MSN Health Channel. Popular herb may weaken the 'Pill' Study: St. John's wort also interferes with AIDS drugs. Available at: <http://www.msnbc.com/news/368672.asp?bt=webmd&btu=javascript:history.back0> Accessed on: 05-22-2000.
16. Piscitelli S, Burstein A, Chaitt D, et al. Indinavir concentrations and St. John's Wort. *Lancet*. 02-12-2000;355:9203:547-550.
17. Kroll D. St. John's Wort: An Example of the Problems with Herbal Medicine Regulation in the United States. Available at: http://www.pharminfo.com/disease/mental/dep_info.html Accessed on: 10-26-1999.
18. Foreman J. Foreman: St. John's wort and antidepressants don't mix. Available at: http://www.startribune.com/stOnLine/cgi_bin/article?thisStory=81304289 Accessed on: 01-24-2000.
19. Herbal remedy for eczema linked to kidney failure. *Minneapolis Star & Tribune*. 08-18-1999;1.

For questions about this page, please contact our Health Policy, Information and Compliance Monitoring Division: hpsc@health.state.mn.us

See also > [Health Policy, Information and Compliance Monitoring Division Home](#)

[MDH HOME](#) | [ABOUT US](#) | [LIBRARY](#) | [NORTH STAR](#)

MAIN CATEGORIES: [Health Data & Statistics](#) | [Diseases & Conditions](#) | [Emergency Preparedness, Response and Recovery](#) | [Facilities & Professions](#) | [Health Care & Coverage](#) | [People & Environment](#) | [Policy, Economics & Legislation](#)

[Comments and Questions](#) | [Phone Number, Address and Directions](#) | [Privacy Statement and Disclaimer](#)

Web Page Last Reviewed Tuesday, 12-Sep-2006 10:31:29 CDT