



For more information about the Organization of Teratology Information Specialists or to find a service in your area, call (866) 626-6847 or visit us online at: www.OTISpregnancy.org.

St. John's Wort (*Hypericum perforatum*) and Pregnancy

This sheet talks about the risks that exposure to St. John's Wort can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

What is St. John's Wort?

St. John's Wort is an herbal medication obtained from the flowering tops of the perennial plant *Hypericum perforatum*. St. John's Wort has many components including anthracene derivatives, flavonoids, xanthenes, caffeic acid derivatives, tannins, and volatile oils. Composition is altered by the harvesting, drying process, and storage of plant material. The herbal medication is taken orally or applied topically depending on the reason for use.

The composition and amount of active ingredients may also vary widely. In the United States St. John's Wort is characterized as a "dietary supplement." Unlike a prescription medication, it is not regulated by the Federal Drug Administration and does not have set standards for preparation, safety, or degree of effectiveness.

What is St. John's Wort used for?

St. John's Wort is most commonly used to treat mild or moderate depression. However, it has also been used to treat other conditions such as sleep disorders, viral infections, cancer, burns and wounds, and insect bites. St. John's Wort has been used for many years in Europe, but has only recently been marketed in the United States.

What are the side effects associated with St. John's Wort?

The most common adverse reaction in adults is sun sensitivity (phototoxicity). Other side effects include allergic hypersensitivity, constipation, dizziness, dry mouth, restlessness, gastrointestinal distress, and sleep disturbances.

St. John's Wort can also interact with many drugs including narcotics, oral contraceptives, prescribed medications for depression, cold and flu medications, and alcohol.

I am taking St. John's Wort, but I would like to stop taking it before becoming pregnant. How long does St. John's Wort stay in your body?

St. John's Wort is a long acting agent, with a 'half life' of 26.5 hours (half-life is the amount of time it takes your body to eliminate half of the dose of the medication). It is likely that levels of St. John's Wort would be low after one week, but there are no studies regarding this. A safe approach would be to discontinue the medication one month before attempting to get pregnant. As always, it would be important to speak with your health care provider regarding the benefits of taking this medication for your specific situation, and any possible concerns with not taking it.

Can taking St. John's Wort make it more difficult for me to become pregnant?

There are no studies regarding the impact of St. John's Wort on female fertility. One study found that high concentrations of St. John's Wort added directly to semen decreased sperm movement and viability. The authors of this study suggested that St. John's Wort might have an ability to harm sperm. Currently it is unknown if taking this agent may decrease fertility. Conversely, St. John's Wort can interfere with the effectiveness of your birth control pills, and may result in unplanned pregnancies.

Can taking St. John's Wort during my pregnancy cause birth defects?

There are no published studies regarding use of St. John's Wort during human pregnancy. Animal studies in mice found decreased birth weight in male offspring, but no other problems with long-term growth or physical development. Studies in rats and mice found no adverse effects on cognition or behavior. This limited data limits our ability to draw conclusions about whether there is an increased risk for birth defects or other problems associated with use of St. John's Wort during pregnancy.

Can taking St. John's Wort during my pregnancy cause other kinds of problems?

St. John's Wort causes increased uterine muscle tone in laboratory animals, and thus could potentially cause uterine contractions. There are no studies regarding St. John's Wort and miscarriage or pregnancy loss. Similarly, there are no studies regarding exposure to St. John's Wort and withdrawal symptoms or effects on the baby's behavior or development. Therefore, any possible associated risks are unknown. St. John's Wort may interfere with the effectiveness of a pregnant woman's prescription medications or general anesthesia. The tannic acid present in St. John's Wort may inhibit absorption of iron, an important mineral for pregnant women and their fetuses.

Should I stop taking St. John's Wort during my pregnancy?

In order to receive the most thorough care during pregnancy, you should contact your health care provider before making any changes in medication or stopping use any time during pregnancy. However, it is clear that much more research is needed regarding the impact of St. John's Wort on the fetus. In some situations where a woman is significantly depressed, her health care provider may choose to prescribe an antidepressant that has been better studied in pregnant women.

Can I take St. John's Wort while breastfeeding?

There is limited information regarding the transfer of St. John's Wort into human milk and the impact of a mother's use of this herbal medication on her breastfed infant. One study, involving 30 women who took St. John's Wort and breastfed, found a higher frequency of infant side effects (lethargy, colic, and drowsiness) when compared to a group of infants whose mothers were not taking the medication.

St. John's Wort is a long-acting medication, and thus any amount ingested by the infant would be expected to remain for a long time. Until more is known about St. John's Wort, many women are choosing to avoid it if they are breastfeeding. If you are significantly depressed, you may wish to speak with your health care provider regarding prescription antidepressants that have been better studied in breastfeeding women.

August 2005.

Copyright by OTIS.

Reproduced by permission.



References:

- Barrett B, et al. 1999. Assessing the risks and benefits of herbal medicine: An overview of scientific evidence. *Altern Ther Health Med* 5(4):40-49.
- Christensen HD, et al. 1999. Effect of antenatal Hypericum (St. John's Wort) on growth and physical development of mice offspring [abstract]. *Teratology* 59(6):411.
- Fetrow CW and Avila JR. 1999. Professional's Handbook of Complementary and Alternative Medicines. Springhouse, PA: Springhouse Corporation.
- Hale T. 1999. Medications and Mother's Milk. Amarillo, TX: Pharmasoft Medical Publishing.
- Lee A, et al. 2003. The safety of St. John's Wort (*Hypericum perforatum*) during Breast-feeding. *J Clin Psychiatry* 64(8):966-968.
- Miller LG. 1998. Herbal medicinals: selected clinical considerations focusing on known or potential drug-herb interactions. *Arch Intern Med* 158(20): 2200-2211.
- Newall CA, et al. 1996. Herbal Medicines: A Guide for Health-care Professionals. Nordeng H and Havnen GC. 2004. Use of herbal drugs in pregnancy: a survey among 400 Norwegian women. *Pharmacoevidenciol Drug Safety* 13:371-380.
- Ondrizek RR, et al. 1999. Inhibition of human sperm motility by specific herbs used in alternative medicine. *J Assist Reprod Genet* 16(2):87-91.
- Rayburn WF, et al. 2001. Impact of Hypericum (St. John's-wort) given prenatally on cognition of mice offspring. *Neurotoxicol Teratol* 23(6):629-637.
- Shiplochliev T. 1981. Extracts from a group of medicinal plants enhancing uterine tonus. *Vet Med Nauki* 18:94-98.

*If you have questions about the information on this fact sheet or other exposures during pregnancy, call **OTIS** at 1-866-626-6847.*