

Berberine

Selected References:

- An Y, et al. 2014. The use of berberine for women with polycystic ovary syndrome undergoing IVF treatment. Clin Endocrinol (Oxf), 80(3):425-431.
- Chan E. 1993. Displacement of bilirubin from albumin by berberine. Biol Neonate, 63:201-208.
- Di Pierro F, et al. 2023. Effect of Berberine Phytosome on reproductive, dermatologic, and metabolic characteristics in women with polycystic ovary syndrome: a controlled, randomized, multi-centric, open-label clinical trial. Frontiers in pharmacology, 14:1269605.
- Ha S & Song X. 2024. Berberine as adjuvant therapy for treating reduced fertility potential in women with polycystic ovary syndrome: A meta-analysis of randomized controlled trials. Explore (New York, N.Y.), 20(6):103040
- Imanshahidi M, et al. 2008. Pharmacological and therapeutic effects of Berberis vulgaris and its active constituent, berberine. Phytother Res, 22:999-1012.
- Lampe KF. 1999. Berberine. In DeSmet PAGM, Keller K, Hnsel R, Chandler RF. Adverse effects of herbal drugs, vol 1: 97-103. Springer-Verlag, Berlin.
- Zhao S, et al. 2021. Effect and mechanism of berberine against polycystic ovary syndrome. Biomedicine & Pharmacotherapy, 138:111468.

Câu hỏi? Gọi 866.626.6847 | Gửi tin nhắn đến 855.999.3525 | Gửi email hoặc trò chuyện tại [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2025.

Berberine

Selected References:

- Deucravacitinib product label. 2022.

<https://dailymed.nlm.nih.gov/dailymed/medguide.cfm?setid=ff4d7258-5068-4cdf-9692-8cae04c3198e> /
https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=ff4d7258-5068-4cdf-9692-8cae04c3198e#ID_b041cd9b-7e1e-45e1-907a-35e03e510ae3

- No authors listed. 2023. Deucravacitinib (Sotyktu) for plaque psoriasis. *Med Lett Drugs Ther*; 65(1670):29-31.

Câu hỏi? Gọi 866.626.6847 | Gửi tin nhắn đến 855.999.3525 | Gửi email hoặc trò chuyện tại [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2025.

Berberine

Selected References:

- Ghafari, DL, et al. 2017. Fertility challenges for women with sickle cell disease. *Expert review of hematology*, 10(10), 891-901.
- Food and Drug Administration. 2019 **HIGHLIGHTS OF PRESCRIBING INFORMATION: OXBRYTA**. https://www.accessdata.fda.gov/drugsatfda_docs/label/2019/213137s000lbl.pdf.
- Food and Drug Administration. 2019. FDA approves voxelotor for sickle cell disease. <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-voxelotor-sickle-cell-disease>.
- Osegbe, DN, et al. 1981. Fertility in males with sickle cell disease. *Lancet (London, England)*, 2(8241), 275-276.
- Patel ZV, et al. 2024. Newer Modalities and Updates in the Management of Sickle Cell Disease: A Systematic Review. *J Blood Med*. 12;15:435-447. doi: 10.2147/JBM.S477507. PMID: 39286637; PMCID: PMC11404495.
- Pecker, LH; Kuo, KH.2022. Go the Distance: Reproductive Health Care for People with Sickle Cell Disease. *Hematology/oncology clinics of North America*, 36(6), 1255-1270.
- Rogers, DT; Molokie, R. 2010. Sickle cell disease in pregnancy. *Obstetrics and gynecology clinics of North America*, 37(2), 223-237.
- Serjeant, GR et al. 2004. Outcome of Pregnancy in Homozygous Sickle Cell Disease. *Obstetrics & Gynecology* 103(6):p 1278-1285.

Câu hỏi? Gọi 866.626.6847 | Gửi tin nhắn đến 855.999.3525 | Gửi email hoặc trò chuyện tại [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2025.

Berberine

Selected References:

- Baldacci S, et al. 2024. Medication use during pregnancy and the risk of gastroschisis: a systematic review and meta-analysis of observational studies. *Orphanet J Rare Dis* 19(1):31.
- Center for Drug Evaluation and Research. (n.d.). NSAIDs may cause rare kidney problems in unborn babies. Retrieved June 6, 2025, from <https://www.fda.gov/drugs/drug-safety-and-availability/fda-recommends-avoiding-use-nsaids-pregnancy-20-weeks-or-later-because-they-can-result-low-amniotic>
- Choi E-Y, et al. 2023. Neonatal and maternal adverse outcomes and exposure to nonsteroidal anti-inflammatory drugs during early pregnancy in South Korea: a nationwide cohort study. *PLoS Med*, 20(2):e1004183.
- Committee on Drugs, American Academy of Pediatrics. 2001. The transfer of drugs and other chemicals into human breast milk. *Pediatrics*, 108:776-789.
- Czeizel AE, et al. 2000. A population-based case-control teratologic study of acetylsalicylic acid treatments during pregnancy. *Pharmacoepidemiol Drug Saf*, 9:193-205.
- Dawood MY. 1993. Nonsteroidal antiinflammatory drugs and reproduction. *Am J Obstet Gynecol*, 169(5):1255-1265.
- Daniel S, et al. 2014. Fetal exposure to nonsteroidal anti-inflammatory drugs and spontaneous abortion. *Can Med Assoc J* 186(5):E177-E182.
- Daniel S, et al. 2015. NSAIDs and spontaneous abortions – true effect or an indication bias? *Br J Clin Pharmacol*, 80(4):750-754.
- Dathe K, et al. 2018. No evidence of adverse pregnancy outcome after exposure to ibuprofen in the first trimester—Evaluation of the national Embryotox cohort. *Reproductive Toxicology*, 79: 32-38.
- Ericson A and Kallen BA. 2001. Nonsteroidal anti-inflammatory drugs in early pregnancy. *Reprod Toxicol*, 15:371-375.
- Findlay JWA, et al. 1981. Analgesic drugs breast milk and plasma. *Clin Pharmacol Ther*, 29:625-33.
- Hastie R, et al. 2021. Aspirin use during pregnancy and the risk of bleeding complications: a Swedish population-based cohort study. *Am J Obstet Gynecol*, 224(1):95.e1-95.e12.
- Hernandez RK, et al. 2012. Nonsteroidal anti-inflammatory drug use among women and the risk of birth defects. *Am J Obstet Gynecol*, 206(3):228.e1-8.

- Jamali F, Keshavarz E. 1981. Salicylate in breast milk. *Int J Pharm*, 8:285-290.
- Janssen NM and Genta MS. 2000. The effects of immunosuppressive and anti-inflammatory medication on fertility, pregnancy, and lactation. *Arch Intern Med*, 160:610-619.
- Killick S, Elstein M. 1987. Pharmacological production of luteinized unruptured follicles by prostaglandin synthetase inhibitors. *Fertil Steril*, 47:773-777.
- Kozer E, et al. 2002. Aspirin consumption during the first trimester of pregnancy and congenital anomalies: a meta-analysis. *Am J Obstet Gynecol*, 187:1623-1630.
- Levin DL, et al. 1978. Morphologic analysis of the pulmonary vascular bed in infants exposed in utero to prostaglandin synthetase inhibitors. *J Pediatr*, 92:478-483.
- Lewis RB, Schulman JD. 1973. Influence of acetylsalicylic acid, an inhibitor of prostaglandin synthesis, on the duration of human gestation and labor. *Lancet*, 2:1159-1163.
- Li DK, et al. 2003. Exposure to non-steroidal anti-inflammatory drugs during pregnancy and risk of miscarriage: population based cohort study. *BMJ*, 327:368-370.
- Martinez-Frias ML, et al. 1997. Prenatal exposure to salicylates and gastroschisis: a case-control study. *Teratology*, 56:241-243.
- Nezvalova-Henriksen K et al. 2013. Effects of ibuprofen, diclofenac, naproxen, and piroxicam on the course of pregnancy and pregnancy outcome: a prospective study. *BJOG*, 120(8):948-959.
- Nielsen GL, et al. 2001. Risk of adverse birth outcome and miscarriage in pregnant users of non-steroidal anti-inflammatory drugs: population based observational study and case-control study. *BMJ*, 322(7281):266-270.
- Nielsen GL, et al. 2004. Danish group reanalyses miscarriage in NSAID users. *BMJ*, 328(7431):109.
- Norgard B, et al. 2005. Aspirin use during early pregnancy and the risk of congenital abnormalities: a population-based case-control study. *Am J Obstet Gynecol*, 192:922-923.
- Petersen TG, et al. 2018. Use of paracetamol, ibuprofen or aspirin in pregnancy and risk of cerebral palsy in the child. *Int J Epidemiol*, 47(1):121-130.
- Rumack CM, et al. 1981. Neonatal intracranial hemorrhage and maternal use of aspirin. *Obstet Gynecol*, 58(Suppl):52S-56S.
- Slone D, et al. 1976. Aspirin and congenital malformations. *Lancet*, 1(7974):1373-1375.
- The WHO Working Group, Bennet PN (ed). 1988. *Drugs and Human Lactation*. Elsevier, Amsterdam, New York, Oxford. pp. 325-326.
- Torfs CP, et al. 1996. Maternal medications and environmental exposures as risk factors for gastroschisis. *Teratology*, 54:84-92.
- Turner G, Collins E. 1975. Fetal effects of regular salicylate ingestion during pregnancy. *Lancet*, 2:338-339.
- Tyler CP, et al. 2012. Brain damage in preterm newborns and maternal medication: the ELGAN study. *Am J Obstet Gynecol*, 207:192e1-9.
- Werler MM, et al. 1989. The relation of aspirin use during the first trimester of pregnancy to congenital cardiac defects. *N Engl J Med*, 321:1639-42.

Câu hỏi? Gọi 866.626.6847 | Gửi tin nhắn đến 855.999.3525 | Gửi email hoặc trò chuyện tại [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2025.

Berberine

Selected References:

- American Academy of Pediatrics. 2023. Breastfeeding during the COVID-19 pandemic. Available at URL: <https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Breastfeeding-During-COVID-19.aspx>
- Academy of Breastfeeding Medicine. 2020. ABM Statement: Considerations for COVID-19 vaccination in lactation. Available at URL: <https://abm.memberclicks.net/abm-statement-considerations-for-covid-19-vaccination-in-lactation>
- Aghsami M, et al. 2024. Effect of SpikoGen subunit vaccine administration during pregnancy on fetal development of rats. *Clinical and Experimental Vaccine Research*. 13(4): 301.
- American College of Obstetricians and Gynecologists. 2024. COVID-19 vaccination considerations for obstetric-gynecologic care. Available at URL: <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/12/covid-19-vaccination-considerations-for-obstetric-gynecologic-care>
- American Society for Reproductive Medicine. 2022. Patient management and clinical recommendations during the coronavirus (COVID-19) pandemic. Available at URL: <https://www.asrm.org/news-and-publications/covid-19/statements/patient-management-and-clinical-recommendations-during-the-coronavirus-covid-19-pandemic>
- Ciapponi A, et al. 2021. Safety of components and platforms of COVID-19 vaccines considered for use in pregnancy: a rapid review. *Vaccine*. 39(40): 5891-5908.
- Etti M, et al. 2022. Maternal vaccination: a review of current evidence and recommendations. *American Journal of Obstetrics and Gynecology*. 226(4): 459-74.
- Hatami D, et al. 2024. Perinatal outcomes and sinopharm BBIBP-CorV vaccination during pregnancy. *BMC Pregnancy and Childbirth*. 24(1): 190.
- Novavax Fact Sheet for Health Care Providers Administering Vaccine. Revised 7/13/2022. Available at URL: <https://www.fda.gov/media/159897/download>
- Ma Y, et al. 2023. Safety and efficacy of inactivated COVID-19 vaccines in women vaccinated during the first trimester of pregnancy. *International Journal of Infectious Diseases*. 130: 196-202.
- Rasmussen SA, et al. 2024. Vaccines in Pregnancy: An Update on Recommendations From CDC's Advisory Committee on Immunization Practices. *Birth defects research*. 117.2: e2459.
- Rimmer MP, et al. 2023. The risk of miscarriage following COVID-19 vaccination: a systematic review and meta-analysis. *Human Reproduction*. 38(5): 840-52.
- Shook LL, et al. 2022. Durability of anti-spike antibodies in infants after maternal COVID-19 vaccination or natural infection. *JAMA* 327(11):1087-89.
- Qiao Y. et al. 2021. Safety profile of COVID-19 vaccines in pregnant and postpartum women in Brazil. *MedRxiv*, 2021-12.

- Underwood E, et al. 2023. Safety, efficacy, and immunogenicity of the NVX-CoV2373 vaccine. Expert Review of Vaccines. 22(1): 501-17.
- Wang Y, et al. 2022. Receipt of inactivated COVID-19 vaccine had no adverse influence on embryo implantation, clinical pregnancy and miscarriage in early pregnancy. Sci China Life Sci. 65:2332-34.
- Yang C, et al. 2023. Inactivated COVID-19 vaccines in peri-pregnancy period: Evaluation of safety for both pregnant women and neonates. Vaccine. 41(49): 7450-59.
- Zambrano LD, et al. 2020. Update: characteristics of symptomatic women of reproductive age with laboratory-confirmed SARS-CoV-2 infection by pregnancy status — United States, January 22–October 3, 2020. MMWR Morb Mortal Wkly Rep. 69:1641–47.

Câu hỏi? Gọi 866.626.6847 | Gửi tin nhắn đến 855.999.3525 | Gửi email hoặc trò chuyện tại [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2025.