Adalimumab (Humira®)

Selected References:

- Akiyama S, et al. 2023. Pregnancy and medications for inflammatory bowel disease: An updated narrative review. World Journal of Clinical Cases, 11(8): 1730.
- Ben-Horin S, et al. 2010. Adalimumab level in breast milk of a nursing mother. Clin Gastroenterol Hepatol;8:475-6.
- Burmester GR, et al. 2017. Adalimumab long-term safety: infections, vaccination response and pregnancy outcomes in patients with rheumatoid arthritis. Ann Rheum Dis. 76(2):414-417.
- Bröms G, et al. 2016. Low risk of birth defects for infants whose mothers are treated with anti-tumor necrosis factor agents during pregnancy. Clin Gastroenterol Hepatol 14(2):234-241.
- Bröms G, et al. 2020. Anti-TNF treatment during pregnancy and birth outcomes: a population-based study from Denmark, Finland, and Sweden. *Pharmacoepidemiology and Drug Safety.* 29(3): 316-327.
- Beaulieu DB, et al. 2018. Use of biologic therapy by pregnant women with inflammatory bowel disease does not affect infant response to vaccines. Clin Gastroenterol Hepatol. 16: 99-105.
- Carter JD, et al.. 2009. A safety assessment of tumor necrosis factor antagonists during pregnancy: a review of the Food and Drug Administration database. The Journal of Rheumatology 36:3.
- Carter JD, et al. 2006. Tumor necrosis factor-alpha inhibition and VATER association: a causal relationship. J Rheumatol 33(5):1014-1017.
- Chambers CD, et al. 2019. Birth outcomes in women who have taken adalimumab in pregnancy: A prospective cohort study. PLoS One 14 (10) e0223603.
- Chaparro M, et al. 2018. Long-Term Safety of In Utero Exposure to Anti-TNFα Drugs for the Treatment of Inflammatory Bowel Disease: Results from the Multicenter European TEDDY Study. Am J Gastroenterol. 113: 396–403. Clark DA. 2010. Anti-TNFalpha therapy in immune-mediated subfertility: state of the art. J Reprod Immunol. 85(1):15-24.
- Cooley LF, et al. 202. Anti-TNF agents and potential effects on male fertility: are men being counseled?.» BMC urology. 20: 1-6.
- Diav-Citrin O, et al. 2014. Pregnancy outcome following gestational exposure to TNF-alpha-inhibitors: A prospective, comparative, observational study. Reprod Toxicol; 43: 78-84.
- Flatman LK, et al. 2025 Serious Infections in Offspring Exposed to Tumour Necrosis Factor Inhibitors During Pregnancy: Comparison of Timing During Pregnancy and Placental Transfer Ability. *Arthritis Rheumatol*.
- Fritzsche J, et al. 2012. Infliximab and adalimumab use during breastfeeding. J Clin Gastroenterol; 46:718-719.
- Götestam Skorpen C, et al. 2016. The EULAR points to consider for use of antirheumatic drugs before pregnancy, and during pregnancy and lactation. Ann Rheum Dis. 75:795–810.
- Hart A, et al. 2022. Observational data from adalimumab post-marketing PYRAMID registry of patients with Crohn's disease who became pregnant: A post hoc analysis. United European Gastroenterology Journal. 10(5): 485-495.
- Hoxha A, et al. 2017. Pregnancy and feotal outcomes following anti-tumor necrosis factor alpha therapy: A prospective multicenter study. Joint Bone Spine 84(2):169-173.
- Huang W, et al. 2024. Anti-tumor necrosis factor-α therapy may not be safe during pregnancy in women with inflammatory bowel disease: an updated meta-analysis and systematic review. *BMC Pregnancy Childbirth*. 2024;24(1):251.
- Jeong YD, et al. 2025. Biologics Use for Psoriasis during Pregnancy and Its Related Adverse Outcomes in Pregnant Women and Newborns: Findings from WHO Pharmacovigilance Study. *Int Arch Allergy Immunol*. 186(6):579-593.
- Johansen CB, et al. 2018. The use and safety of TNF inhibitors during pregnancy in women with psoriasis: A review. Int J Mol Sci. 19(5):1349

- Julsgaard M, et al. 2013. Adalimumab levels in an infant. J Crohns Colitis;7(7):597-598.
- Kawai Y, et al. 2019. Pregnancy outcomes of patients exposed to adalimumab in Japan. Dig Dis 37(2): 123-130.
- Laube R, et al. 2023. Australian inflammatory bowel disease consensus statements for preconception, pregnancy and breast feeding. Gut 72(6): 1040-1053.
- Leung Y, et al. 2014. Management of the pregnant inflammatory bowel disease patient on anti-tumor necrosis factor: state of the art and future directions. Can J Gastroenterol Hepatol; 28(9):505-509.
- Liu Q, et al. 2025. Abortion adverse events associated with adalimumab, etanercept, ustekinumab, and dupilumab during pregnancy: A pharmacovigilance study based on FDA adverse event reporting system. *Drug Discov Ther*. 2025;19(3):160-173.
- Lund T, et al. 2016. Use of TNF-inhibitors and ustekinumab for psoriasis during pregnancy: A patient series. Derm Therapy. May; 30 (3)
- Luu M, et al. 2018. Continuous anti-TNFα use throughout pregnancy: possible complications for the mother but not for fetus. A retrospective cohort on the French National Health Insurance Database (EVASION). ACG, 113(11):1669-1677.
- Mahadevan U, et al. 2014. Achievement of developmental milestones among offspring of women with inflammatory bowel disease: the PIANO registry. Gastroenterology 146(5):1.
- Mahadevan U, et al. 2019. Inflammatory bowel disease in pregnancy clinical care pathway: A report from the American Gastroenterological Association IBD parenthood project working group. Gastroenterology 156:1508-1524.
- Matro R, et al. 2018. Exposure concentrations of infants breastfed by women receiving biologic therapies for inflammatory bowel diseases and effects of breastfeeding on infections and development. Gastroenterology 155:696-704.
- Micu MC, et al. 2014. TNF-alpha inhibitors do not impair sperm quality in males with ankylosing spondylitis after short-term or long-term treatment. Rheumatology (Oxford). Jul;53(7):1250-1255.
- Mishkin DS, et al. 2006. Successful use of adalimumab (Humira) for Crohn's disease in pregnancy. Inflamm Bowel Dis. 12:827-828.
- Nielsen O, et al. 2022. Biologics for inflammatory bowel disease and their safety in pregnancy: a systematic review and meta-analysis. Clinical Gastroenterology and Hepatology. *20*(1): 74-87.
- Palomino L, et al. 2025. Psychomotor Development in Infants Following Maternal Exposure to Biologics: Results From the DUMBO Registry. *Clin Gastroenterol Hepatol*. Online ahead of print.
- Picardo S, et al. 2019. A pharmacological approach to managing inflammatory bowel disease during conception, pregnancy and breastfeeding: Biologic and oral small molecule therapy. Drugs 79:1053-1063.
- Ramonda R, et al. 2014. Influence of tumor necrosis factor alpha inhibitors on testicular function and semen in spondyloarthritis patients. Fertil Steril; 101(2):359-365.
- Roux CH, et al. 2006. Pregnancy in rheumatology patients exposed to anti-tumour necrosis factor (TNF)-{alpha} therapy. Rheumatology 46:695-698. Rüegg L, et al. 2025. EULAR recommendations for use of antirheumatic drugs in reproduction, pregnancy, and lactation: 2024 update. *Ann Rheum Dis*. 2025;84(6):910-926.
- Russell MD, et al. 2023. British Society for Rheumatology guideline on prescribing drugs in pregnancy and breastfeeding: Immunomodulatory anti-rheumatic drugs and corticosteroids. Rheumatology. 62: e48–88.
- Sammaritano LR, et al. 2020 American College of Rheumatology Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases. Arthritis Rheumatol. 72:529–556.
- Schnitzler F et al. 2011. Outcome of pregnancy in women with inflammatory bowel disease treated with antitumor necrosis factor therapy. Inflamm Bowel Dis. 17(9):1846-1854.
- Shihab Z, et al. 2016. Anti-tumour necrosis factor α therapies and inflammatory bowel disease pregnancy outcomes: a meta-analysis. Journal of Crohn's and Colitis. 10(8): 979-988.
- Smith CH, et al. 2020. British Association of Dermatologists guidelines for biologic therapy for psoriasis 2020: A rapid update. Br J Dermatol. 183:628–637.
- Truta B, et al. 2022. Outcomes of Continuation vs Discontinuation of Adalimumab Therapy During Third Trimester of Pregnancy in Inflammatory Bowel Disease. Gastro Hep Advances. *1*(5):785-791.

- Villiger PM, et al. 2010. Effects of TNF antagonists on sperm characteristics in patients with spondyloarthritis. Ann Rheum Dis 69(10): 1842-1844.
- Viktil KK, et al. 2012. Outcomes after anti-rheumatic drug use before and during pregnancy: a cohort study among 150 000 pregnant women and expectant fathers. Scandinavian Journal of Rheumatology, 41(3): 196-201.
- Wang H, et al. 2022. Comparative safety of infliximab and adalimumab on pregnancy outcomes of women with inflammatory bowel diseases: a systematic review & meta-analysis. BMC Pregnancy and Childbirth. *22*(1): 1-10.

Descargo de responsabilidad: las hojas informativas de MotherToBaby están destinadas a fines de información general y no deben reemplazar los consejos de su proveedor de atención médica. MotherToBaby es un servicio de la Organización sin fines de lucro de Especialistas en Información de Teratología (OTIS). Copyright de OTIS, 1 de diciembre de 2025.

Adalimumab (Humira®)

Selected References:

- Afrman JJ, et al. 2020. Therapeutic Drug Monitoring of Antiepileptic Drugs in Women with Epilepsy Before, During, and After Pregnancy. Clin Pharmacokinet, 59(4):427-445.
- Alsaad AMS, et al. 2015. First trimester exposure to topiramate and the risk of oral clefts in the offspring: A systematic review and meta-analysis. Reprod Toxicol, 53:45-50.
- Blotière PO, et al. 2020. Risk of early neurodevelopmental outcomes associated with prenatal exposure to the antiepileptic drugs most commonly used during pregnancy: a French nationwide population-based cohort study. BMJ open, 10(6):e034829.
- Blotière PO, et al. 2019. Risks of 23 specific malformations associated with prenatal exposure to 10 antiepileptic drugs. Neurology, 93(2):e167-80.
- Bjork MH, et al. 2022. Association of prenatal exposure to antiseizure medication with risk of autism and intellectual disability. JAMA Neurol, 79(7):672.
- Bozhinov PSB, et al. 2004. Normalisation of impaired reproduction functions after switching to topiramate monotherapy. Epilepsia, 45(Suppl 3):152.
- Bromley RL, et al. 2016. Cognition in school-age children exposed to levetiracetam, topiramate, or sodium

valproate. Neurology, 87(18):1943-53.

- Christensen J, et al. 2024. Prenatal exposure to antiseizure medications and fetal growth: a population-based cohort study from the Nordic countries. Lancet, Reg Health Eur, 38:100849.
- Committee on Drugs. 2001. The transfer of drugs and other chemicals into human milk. Pediatrics, 108(3):776-789.
- Doose DR, et al. 2003. Effect of topiramate or carbamazepine on the pharmacokinetics of an oral contraceptive containing norethindrone and ethinyl estradiol in healthy obese and nonobese female subjects. Epilepsia, 44(4):540-549.
- Fröscher W, et al. 2006. Topiramate use during breast feeding. Aktuel Neurol, 33:215-217.
- Gentile S. 2009. Topiramate in pregnancy and breastfeeding. Clin Drug Investig, 29:139-141.
- Hao N, et al. 2025. Seizure control and pregnancy outcomes in Chinese women with epilepsy: A prospective multicenter cohort study. Epilepsia, 66(5):1573-1584.
- Heinonen OP, Slone D, Shapiro S. 1977. Birth defects and drugs in pregnancy. Littleton, MA: John Wright-PSG, pp 389, 391-392, 394, 443, 478, 497.
- Hernandez-Diaz S, et al., for the North American AED Pregnancy Registry. 2012. Comparative safety of antiepileptic drugs during pregnancy. Neurology, 78:1692-1699.
- Hernandez-Diaz S, et al. 2014. Association between topiramate and zonisamide use during pregnancy and low birth weight. Ob Gyn, 123(1):21-28.
- Hernandez-Diaz S, et al. 2017. Fetal growth and premature delivery in pregnant women on antiepileptic drugs. Ann Neurol, 82(3):457-465.
- Hernandez-Diaz S, et al. 2018. Topiramate use early in pregnancy and the risk of oral clefts: a pregnancy cohort study. Neurology, 90(4):e342-351.
- Hernandez-Diaz S, et al. 2024. Risk of autism after prenatal topiramate, valproate, or lamotrigine exposure. N Engl J Med, 390:1069-1079.
- Hernandez-Diaz S, et al., 2025. Use of Antiseizure Medications Early in Pregnancy and the Risk of Major Malformations in the Newborn. Neurology, 105(3):e213786.
- Holtkamp M, et al. 2005. Erectile dysfunction with topiramate. Epilepsia, 46(1):166-167.
- Johannessen SI, et al. 2005. Levetiracetam concentrations in serum and in breast milk at birth and during lactation. Epilepsia, 46:775-777.
- Keni RR, et al. 2018. Teratogenicity of antiepileptic dual therapy: Dose-dependent, drug-specific, or both?. Neurology, 90(9): e790-796.
- Keni RR, et al. 2020. Anti-epileptic drug and folic acid usage during pregnancy, seizure and malformation outcomes: Changes over two decades in the Kerala Registry of Epilepsy and Pregnancy. Epilepsy Research, 159:106250.
- Laspro M, et al. 2025. Association of Commonly Prescribed Antepartum Medications and Incidence of Orofacial Clefting. The Cleft Palate Craniofacial Journal, 62(7):1164-1174.
- Madley-Dowd P, et al. 2024. Antiseizure medication use during pregnancy and children's neurodevelopmental outcomes. Nature Communications, 15(1).
- Öhman I, et al. 2002. Topiramate kinetics during delivery, lactation, and in the neonate: Preliminary observations. Epilepsia, 43:1157-1160.
- Öhman I, et al. 2007. Topiramate kinetics during lactation. Epilepsia, 48(Supp 7):156-157.
- Ornoy A, et al. 2017. Antidepressants, antipsychotics, and mood stabilizers in pregnancy: what do we know and how should we treat pregnant women with depression. Birth defects research, 109(12):933-956.
- Tomson T, et al. 2018. Comparative risk of major congenital malformations with eight different antiepileptic drugs: a prospective cohort study of the EURAP registry. The Lancet Neurology, 17(6):530-538.
- Vajda FJ, et al. 2016. Antiepileptic drug combinations not involving valproate and the risk of fetal malformations. Epilepsia, 57(7):1048-1052.
- Vajda FJ, et al. 2018. Antiepileptic drug polytherapy in pregnant women with epilepsy. Acta Neurologica Scandinavica, 138(2):115-121.

- Vajda FJ, et al. 2019. Antiepileptic drugs and foetal malformation: analysis of 20 years of data in a pregnancy register. Seizure, 65:6-11.
- Vajda FJ, et al. 2020. Preexisting illness, fetal malformation, and seizure control rates in pregnant women with epilepsy. Epilepsy & Behavior; 9:106481.
- Veroniki AA, et al. 2017. Comparative safety of anti-epileptic drugs during pregnancy: a systematic review and network meta-analysis of congenital malformations and prenatal outcomes. BMC medicine. 15(1):95.
- Westergren T, et al. 2014. Probable topiramate-induced diarrhea in a 2-month-old breast-fed child – A case report. Epilepsy Behav Case Rep, 2:22-23. Weston J, et al. 2016. Monotherapy treatment of epilepsy in pregnancy: congenital malformation outcomes in the child. Cochrane
- Database Syst Rev, 11: Cd010224.
- Wu M, et al. 2016. Spermatorrhea and loss of libido induced by topiramate: First case report and review of literature. Clin Neuropharm, 39:325-326.
- Zeng Y, et al. 2025. Safety concerns of maternal antiseizure medications exposure on perinatal and offspring outcomes: a disproportionality analysis based on FDA adverse event reporting system. Journal of Neurology, 272:429.

Descargo de responsabilidad: las hojas informativas de MotherToBaby están destinadas a fines de información general y no deben reemplazar los consejos de su proveedor de atención médica. MotherToBaby es un servicio de la Organización sin fines de lucro de Especialistas en Información de Teratología (OTIS). Copyright de OTIS, 1 de diciembre de 2025.

Adalimumab (Humira®)

Selected References:

- Amundsen S, et al. 2015. Pharmacological treatment of migraine during pregnancy and breastfeeding; Nat. Reviews Neurol. 11(4): 209-215.
- Bandoli G, et al. 2020. Migraines During Pregnancy and the Risk of Maternal Stroke. JAMA Neurol. 77(9):1177-79.
- Bánhidy F, et al. 2006. Maternal severe migraine and risk of congenital limb deficiencies. Birth Defects Res a Clin Mol Teratol. 76(8):592-601.

- Conijn M, et al. 2024. Breastfeeding-related adverse drug reactions of triptans: A descriptive analysis using four pharmacovigilance databases. Breastfeed Med. 19:645-51.
- Cunnington M, et al. 2009. The safety of sumatriptan and naratriptan in pregnancy: what have we learned? Headache. 49(10):1414-22.
- David PS, et al. 2014. Migraine in pregnancy and lactation. Curr Neurol Neurosci Rep. 14(4):439.
- Duong S, et al. 2010. Safety of triptans for migraine headaches during pregnancy and breastfeeding. Can Fam Physician. 56(6):537-9.
- Ephross AS, et al. 2014. Final results from the 16-year sumatriptan, naratriptan, and treximet pregnancy registry. Headache. 54(3):1158-1172.
- Harris GE, et al. 2018. Prenatal triptan exposure and neurodevelopmental outcomes in 5-year-old children: Follow-up from the Norwegian Mother and Child Cohort Study. Paediatr Perinat Epidemiol. 32(3):247-255.
- Jarvis S, et al. 2018. Managing migraine in pregnancy. BMJ 360:k80.
- Källén B, et al. 2011. Delivery outcome after maternal use of drugs for migraine: a register study in Sweden. Drug Saf. 34(8):691-703.
- MacGregor AE, et al. 2014. Migraine in pregnancy and lactation. Neurol Sci. 35(Suppl 1): S61-S64.
- Marchenko A, et al. 2015. Pregnancy outcome following prenatal exposure to triptan medications: a meta-analysis. Headache. 55(10):1478.
- Miller C & Vollbracht S. 2021. Neurology of Preeclampsia and Related Disorders: An Update in Neuro-obstetrics. Curr Pain Headache Rep. 25(6):40.
- Negro A, et al. 2017. Headache and pregnancy: a systematic review. The Journal of Headache and Pain 18(1):106.
- Nezvalová-Henriksen K, et al. 2010. Triptan exposure during pregnancy and the risk of major congenital malformations and adverse pregnancy outcomes: results from the Norwegian Mother and Child Cohort Study. Headache. 50(4):563-75.
- Nezvalová-Henriksen K, et al. 2013. Triptan safety during pregnancy: a Norwegian population registry study. Eur J Epidemiol. 28(9):759-69.
- Olesen C, et al. 2000. Pregnancy outcome following prescription for sumatriptan. Headache. 40(1):20-4.
- Spielmann K, et al. 2018. Pregnancy outcome after anti-migraine triptan use: a prospective observational cohort. Cephalagia. 38(6):1081-1092.
- Wabnitz A, Bushnell C. 2015. Migraine, cardiovascular disease, and stroke during pregnancy: systematic review of the literature. Cephalalgia. 35(2):132-9.
- Wojnar-Horton RE, et al. 1996. Distribution and excretion of sumatriptan in human milk. Br J Clin Pharmacol. 41(3):217-21.
- Wood ME, et al. 2016. Prenatal Triptan Exposure and Internalising and Externalising Behaviour Problems in 3-Year-Old Children: Results from the Norwegian Mother and Child Cohort Study. Paediatr Perinat Epidemiol. 30(2):190-200.

Descargo de responsabilidad: las hojas informativas de MotherToBaby están destinadas a fines de información general y no deben reemplazar los consejos de su proveedor de atención médica. MotherToBaby es un servicio de la Organización sin fines de lucro de Especialistas en Información de Teratología (OTIS). Copyright de OTIS, 1 de diciembre de 2025.

Adalimumab (Humira®)

Selected References:

- American College of Obstetricians and Gynecologists (ACOG). 2018. Moderate caffeine consumption during pregnancy. https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Moderate-Caffeine-Consumption-During-Pregnancy?IsMobileSet=false.
- American Society for Reproductive Medicine (ASRM). 2022. Optimizing natural fertility: A Committee Opinion. https://www.asrm.org/practice-guidance/practice-committee-documents/optimizing-natural-fertility-a-committee-opinion-2021/
- Bech BH, et al. 2005. Coffee and fetal death: a cohort study with prospective data. Am J Epidemiol, 162(10):983-990.
- Brown ML, et al. 2006. Maternal exposure to caffeine and risk of congenital anomalies: a systematic review. Epidemiology, 17(3):324-331.
- CaffeineInformer. 2019. Caffeine in Guarana. https://www.caffeineinformer.com/caffeine-content/guarana. Accessed October 22, 2019.
- Chiaffarino F, et al. 2006 Coffee drinking and risk of preterm birth. Eur J Clin Nutr; 60:610–613.
- Christian M and Brent R. 2001.Teratogen update: Evaluation of the reproductive and developmental risks of caffeine. Teratology, 64:51-78.
- Cnattingius S, et al. 2000. Caffeine intake and the risk of first-trimester spontaneous abortion. N Engl J Med, 343:1839-1845.
- Committee on Drugs, 2001. American Academy of Pediatrics. The transfer of drugs and other chemicals in human milk. Pediatrics, 108(3):776-789.
- D'Urso S, et al. 2024. Mendelian randomization analysis of maternal coffee consumption during pregnancy on offspring neurodevelopmental difficulties in the Norwegian Mother, Father and Child Cohort Study (MoBa). Psychological medicine, 54(12):1–14.
- Eskenazi B. 1999. Caffeine—Filtering the facts. N Engl J Med, 341:1688-1689. Hatch E and Bracken M. 1993. Association of delayed conception with caffeine consumption. Am J Epidemiol, 138:1082-1091. Klebanoff M, et al. 1999. Maternal serum paraxanthine, a caffeine metabolite, and the risk of spontaneous abortion. New Engl J Med, 341:1639-1644.
- Klebanoff M and Keim SA. 2015. Maternal caffeine intake during pregnancy and child cognition and behavior at 4 and 7 years of age. Am J Epidem, 182(12):1023-1032.
- Kobayashi S, et al. 2019. Dose-dependent associations between prenatal caffeine consumption and small for gestational age, preterm birth, and reduced birthweight in the Japan Environment and Children's Study. Paediatr Perinat Epidemiol, 33:185–194.
- Kukkonen A, et al. 2024. Maternal caffeine intake during pregnancy and the risk of delivering a small for gestational age baby: Kuopio Birth Cohort. Archives of gynecology and obstetrics, 310(1):359–368.

- Larroque B, et al. 1993. Effects on birthweight of alcohol and caffeine consumption during pregnancy. Am J Epidemiol, 137:941-950.
- Lyngsø J, et al. 2017. Association between coffee or caffeine consumption and fecundity and fertility: a systematic review and dose–response meta-analysis. Clin Epidemiol, 9:699-719.
- Maslova E, et al. 2010. Caffeine consumption during pregnancy and risk of preterm birth: a meta-analysis. Am J Clin Nutr, 92:1120–1132.
- Matijasevich A, et al. 2006. Maternal caffeine consumption and fetal death: a case-control study if Uruguay. Paediatr Perinat Epidemiol, 20(2):100-109.
- Mills JL, et al. 1993. Moderate caffeine use and the risk of spontaneous abortion and intrauterine growth. JAMA, 269:593-597.
- Okubo H, et al. 2015. Maternal total caffeine intake, mainly from Japanese and Chinese tea, during pregnancy was associated with risk of preterm birth: the Osaka Maternal and Child Health Study. Nutr Res, 35:309–316.
- Ricci E, et al. 2017. Coffee and caffeine intake and male infertility: a systematic review. Nutr J, 16(1)37.
- Saimaiti A, et al. 2023. Dietary sources, health benefits, and risks of caffeine. Crit Rev Food Sci Nutr, 63(29):9648-9666.
- Ruderman RS, et al. 2025. Periconceptual Caffeine Intake and Adverse Pregnancy Outcomes: Results From the nuMoM2b Cohort. BJOG: an international journal of obstetrics and gynaecology, 10.1111/1471-0528.70018.
- Savitz DA, et al. 2008. Caffeine and miscarriage risk. Epidemiology, 19(1):55-62. Schellhas L, et al. 2023. Maternal caffeine consumption during pregnancy and offspring cord blood DNA methylation: an epigenome-wide association study meta-analysis. Epigenomics, 15(22):1179-1193.
- Shu XO, et al. 1995. Maternal smoking, alcohol drinking, caffeine consumption and fetal growth: Results from a prospective study. Epidemiology, 6:115-120.
- Weng, X, et al. 2008. Maternal caffeine consumption during pregnancy and the risk of miscarriage: a prospective cohort study. Am J Obstet Gynecol, 279:e1-e8.
- Zhang H, et al. 2024. Association between tea, coffee and caffeine consumption and risk of female infertility: a cross-sectional study. Reproductive biology and endocrinology: RB&E, 22(1):91.

Descargo de responsabilidad: las hojas informativas de MotherToBaby están destinadas a fines de información general y no deben reemplazar los consejos de su proveedor de atención médica. MotherToBaby es un servicio de la Organización sin fines de lucro de Especialistas en Información de Teratología (OTIS). Copyright de OTIS, 1 de diciembre de 2025.

Adalimumab (Humira®)

Selected References:

- ANI Pharmaceuticals. 2024. Etodolac product labeling. Available at: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=420c7b62-3bea-4d6b-82e0-ab1c176c7f1e. Accessed 21 July 2025.
- 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.
- Dawood MY. 1993. Nonsteroidal antiinflammatory drugs and reproduction. Am J Obstet Gynecol, 169(5):1255-1265.
- Daniel S, et al. 2012. Major Malformations Following Exposure to Nonsteroidal Antiinflammatory Drugs During the First Trimester of Pregnancy. J Rhuematol 39(11) 2163-2169.
- 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-
- 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.
- 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.
- U.S. Food and Drug Administration. 2020. FDA recommends avoiding use of NSAIDs in pregnancy at 20 weeks or later because they can result in low amniotic fluid. Available at: 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. Accessed 21 July 2025.

¿Preguntas? Llame al 866.626.6847 | Texto 855.999.3525 | Correo electrónico o chat en MotherToBaby.org .

Descargo de responsabilidad: las hojas informativas de MotherToBaby están destinadas a fines de información general y no deben reemplazar los consejos de su proveedor de atención médica. MotherToBaby es un servicio de la Organización sin fines de lucro de Especialistas en Información de Teratología (OTIS). Copyright de OTIS, 1 de diciembre de 2025.