| Table 2: OTC Medication Use During Pregnancy & Lactation | | |
|---|---|---|
| **Drug/Drug Class** | **Use in Pregnancy** | **Use in Lactation** |
| **Pain & Fever** | | |
| Paracetamol | Pain reliever of choice | Compatible with breastfeeding |
| Non-aspirin NSAIDs e.g., Ibuprofen, Naproxen. | Use with caution; avoid in 3rd trimester. Associated with oligohydramnios, premature closure of the fetal ductus arteriosus, inhibition of labour, fetal renal toxicity, and periventricular hemorrhage. | Ibuprofen is the preferred NSAID |
| Aspirin | Not recommended except for specific indications. Associated with increased perinatal mortality, neonatal hemorrhage, decreased birth weight, prolonged gestation and labor, and possible teratogenicity | Compatible with breastfeeding in occasional doses. Avoid long-term therapy, if possible. Monitor infant for side-effects (haemolysis, prolonged bleeding time and metabolic acidosis) |
| Topical NSAIDs | Likely safe. Avoid occlusive dressings | |
| According to American Family Physician, the use of NSAIDs during pregnancy has potential risks and recommends careful risk-benefit assessment by the doctor. | | |
| **Allergy, Cough & Cold** | | |
| Antihistamines (e.g., Chlorphenamine, Diphenhydramine) | Chlorphenamine is antihistamine of choice. | Avoid if possible. Monitor infant for side-effects (drowsiness, irritability). May inhibit lactation |
| American Family Physician recommends that first- and second-generation antihistamines do not appear to increase fetal risk in any trimester. | | |
| Antitussives (e.g., Diphenhydramine) | Appears to be safe, crosses the placenta. Avoid products with alcohol | No data available. Caution advised |
| Expectorants (e.g., Guaifenesin) | May be unsafe in 1st trimester. Possible increased risk of neural tube defects | |
| Decongestants (e.g., Pseudoephedrine, Saline Nasal Spray) | Saline nasal spray preferred. Oral decongestant of choice, possible association with gastroschisis | Saline nasal spray preferred. Topical Oxymetazoline may be safe. |
| **Constipation** | | |
| Lifestyle modifications | Increase fluid and fiber intake (e.g., bran cereal). Exercise daily. | |
| Fibre (e.g., Psyllium) | Not absorbed. Considered first-line. Increase dose slowly to avoid gas and use with plenty of water. | No data available. Not absorbed; considered compatible with breastfeeding |
| Magnesium hydroxide (Milk of Magnesia) | No data available | Magnesium is poorly absorbed by infants. Compatible with breastfeeding. |
| Senna | No evidence of human teratogenicity or other fetal toxicity. Long-term use not recommended | Compatible with breastfeeding; use only if dietary measures for treating constipation fail |

| Table 2: OTC Medication Use During Pregnancy & Lactation | | |
|---|---|---|
| **Drug/Drug Class** | **Use in Pregnancy** | **Use in Lactation** |
| Mineral oil | Avoid. Chronic use may lead to impaired maternal absorption of fat-soluble vitamins and fetal coagulopathy and hemorrhage | Chronic use could impair maternal absorption of fat-soluble vitamins |
| **Diarrhoea** | | |
| Oral rehydration salts (glucose-electrolyte solution) | Drink small, frequent amounts. Pregnant women can become easily dehydrated. Consider early use of IV fluids. | Compatible with breastfeeding |
| Kaolin and pectin | Not absorbed; safe. Check the formulation | No data available. Not absorbed |
| Codeine | Caution advised. CNS depression and neonatal withdrawal possible. | Compatible with breastfeeding in occasional doses. Avoid repeated doses if possible. Monitor the infant for side-effects (apnoea, bradycardia and cyanosis) |
| Loperamide | Avoid, or use with discretion. Possible increase in fetal cardiac malformation with first-trimester use. | Excreted into breast milk in low concentrations unlikely to affect infant. Compatible with breastfeeding |
| **GERD/Heartburn** | | |
| Lifestyle modifications | Elevate head of the bed. Eat small, frequent meals. Avoid eating near bedtime. | |
| Antiflatulent (e.g., Simethicone) | Nonabsorbable. No reports of malformations. | No data available. Not absorbed; therefore, no risk to infant |
| Alginic acid | No fetal safety information available. | No data available. |
| Aluminum hydroxide/Magnesium hydroxide | Not teratogenic in animal studies. Considered safe in normal doses. | No data available. Poorly absorbed; use acceptable |
| Calcium carbonate | Considered first-line antacid. Excessive intake can lead to maternal milk-alkali syndrome (hypercalcemia, renal impairment, metabolic alkalosis). | No data available. Use acceptable |
| Magnesium trisilicate | Avoid. Chronic, high-dose use associated with fetal renal stones, hypotonia, & respiratory distress | No data available. |
| Sodium bicarbonate | Avoid. Can cause maternal/fetal metabolic alkalosis and fluid overload. | No data available. |
| $H_2$RAs (e.g., Ranitidine, Cimetidine) | Ranitidine is the preferred $H_2$RA. | Excreted into the breast milk but not expected to cause adverse effects in nursing infant.<br>As per WHO, avoid Cimetidine if possible due to insufficient data on long-term side-effects. |

| Table 2: OTC Medication Use During Pregnancy & Lactation | | |
|---|---|---|
| **Drug/Drug Class** | **Use in Pregnancy** | **Use in Lactation** |
| PPIs (e.g., Omeprazole) | Omeprazole has most data and consistently safe. Considered PPI of choice | Low concentrations in breast milk. May be safe, but caution is advised due to acid suppression & association with gastric tumors (based on animal data). |
| American Family Physician recommends that $H_2$RAs and PPIs can be used during any trimester of pregnancy without risk of anomalies. | | |
| **Nausea & Vomiting** | | |
| Lifestyle modifications | Eat small, frequent meals. Maintain adequate hydration. Eat bland foods and avoid spicy, fatty, or foods with strong odors. Increase rest | |
| Doxylamine/pyridoxine combination (Murnisik®) | Considered first line for nausea & vomiting of pregnancy | Doxylamine is excreted into breast milk. Its sedative and other antihistamine effects in a nursing infant may be a concern. |
| Promethazine | Possible association with cardiovascular defects. Low risk; may use as add-on therapy. Avoid use near term. | Compatible with breastfeeding in single dose. Avoid repeated doses, if possible. Monitor the infant for drowsiness |
| Ginger supplements | Proven benefit in NVP. Concern about variation in product potency and purity. Recommended dose is Ginger tablet 250 mg q6h | Data not available |
| **Nutrition** | | |
| Folic acid<br>Risk factors for neural tube defect (NTD): diabetes, BMI >35 kg/m$^2$, smoker, history of NTD, drugs (e.g., anticonvulsants, methotrexate, sulfonamide, trimethoprim), etc. | Dose based on risk of NTD:<br>Low risk: 0.4-1 mg po daily throughout pregnancy<br>High risk: 5 mg po daily 1$^{st}$ trimester, then reduce to 0.4-1 mg po daily | 0.4-1 mg po daily, continue 6 weeks postpartum or as long as breastfeeding continues. |
| Vitamins & minerals | Iron, calcium, & vitamin D supplements based on individual need.<br>Vitamin A is teratogenic | Vitamin D supplement for term infants in 1$^{st}$ year: 400-800 IU/day.<br>Check Infant formulas for the vitamin D content. |

*Sources*: 1) World Health Organization & UNICEF. Breastfeeding and maternal medication: Recommendations for drugs in the eleventh WHO model list of essential drugs. WHO; 2003.
2) Kosar L. Peri-pregnancy: drug treatment considerations. RxFiles; 2014 Oct. Available from: www.rxfiles.ca (login required).
3) PL Detail-Document, GI Med Use in Pregnancy and Lactation. Pharmacist's Letter/Prescriber's Letter. June 2013.
4) Servey J, Chang J. Over-the-counter medications in pregnancy. Am Fam Physician. 2014 Oct 15;90(8):548-555
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