

## Drugs and Breast Feeding

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*Epitheorese Klinikes Farmakologias kai Farmakokinetikes (Ell. ekd.)* 5: 139-154

**S U M M A R Y:** Almost all drugs or pollutants appearing in nursing mother's blood are also found in the breast milk in concentrations depending upon duration of exposure, route of administration, efficiency of biotransformation and excretory mechanisms, relative time between breast feeding and administration, interactions between drugs or between a drug and another compound, previous ingestion or exposure, degree of binding to plasma proteins etc. On the other hand, absorption of drugs by the nursing infant depends on the functional readiness of the gastrointestinal tract and may be modified by factors such as gastric emptying time, GI motility, gastric pH, interaction of drugs with components of the GI tract, dietary factors, effective surface area etc. However, physiologic variations which occur in the first week of the life may limit or facilitate drug absorption. Excretion remains the most important factor for the determination of drugs effects, because rates of drug metabolism are slower at the time of birth.

*Drugs taken by the mother for which breast feeding is general contraindicated.* Analgesics (long term use); anticoagulants (e.g. ethylbiscoumacetate, phenindione-except heparin and warfarin); antimicrobial

agents (e.g. chloramphenicol, sulfonamides, tetracyclines); antithyroid drugs (e.g. carbimazole, methimazole, thiouracil - except propylthiouracil); ergot and ergot derivatives (e.g. bromocriptine, ergotamine); antirheumatics (e.g. high doses of indomethacin, gold preparations); immunosuppressive-cytotoxic agents; hormonal steroids (e.g. oestrogen-progestagen combination oral contraceptives); antianxiety-antipsychotic drugs (e.g. diazepam, lithium carbonate); cardiac drugs (e.g. reserpine, quinidine); radioactive drugs (e.g. iodine); social drugs (e.g. alcohol-excessive, cannabis, cocaine, D-lysergic acid-LSD); cimetidine; environmental pollutants (mercury, hexachlorobenzene, polyhalogenated biphenyls - PCB<sub>5</sub>, PBB<sub>5</sub>); fava beans.

*Some drugs which have been reported to cause adverse effects in breast fed infants:* Alcohol, caffeine, heroin, nicotine; antibacterial (e.g. ampicillin, benzylpenicillin, clindamycin, dapson, metronidazole, nalidixic acid); anaesthetics (e.g. chloroform); antiepileptic - antianxiety - antipsychotic drugs (e.g. diazepam, phenobarbitone, phenytoin, chlorpromazine, lithium); laxatives (e.g. cascara, danthron, senna); miscellaneous: bethanechol, bromides, chloral hydrate, pregnane, reserpine, theophylline, vitamin D.