Table 1. Drugs that alter oral contraceptive concentrations/ effects.

Drug class	Generic (trade)	Effect	Recommendation
Antibiotics	erythromycin (E-Mycin, etc.) griseofulvin (Grifulvin, etc.) penicillins rifampin (Rifadin, etc.) tetracycline (Sumycin, etc.) ***Risk is present with all antiobiotics.***	Antibiotics disrupt normal GI flora, interfering with enterohepatic recirculation and decreasing OC serum levels and efficacy. Rifampin and griseofulvin also increase OC metabolism by inducing CYP450 enzymes.	Use alternative method of contraception during the antibiotic treatment course and for at least one OC cycle after finishing the antibiotic.
Anticonvulsants	carbamazepine (Tegretol) phenobarbital phenytoin (Dilantin) primidone (Mysoline)	OC action may be decreased. These agents induce CYP450 enzymes, increasing OC metabolism and decreasing OC serum levels.*	Use alternative method of contraception or consider a higher-dose (≥ 50 mcg EE) OC product.
Azole antifungal agents	fluconazole (Diflucan) itraconazole (Sporanox) ketoconazole (Nizoral)	OC action may be decreased.	Use alternative method of contraception during use and for one OC cycle after.
Agents that inhibit estrogen metabolism	grapefruit (or juice) cimetadine (Tagamet) atorvastatin (Lipitor)	Decrease estrogen metabolism, thus increasing estrogen levels and estrogen-related side effects.	Monitor for signs of estrogen excess.

** Other CYP450 enzyme inducers include: pioglitazone (Avadnia); modafinil (Provagil); and anti-retrovirals (protease inhibitors, non-nucleoside reverse transcriptase inhibitors, and St. John's wort).*