



Clinically Significant Caffeine-Drug Interactions

Drug Class	Examples	Interaction Effect
Fluoroquinolone antibiotics	<i>Ciprofloxacin, levofloxacin</i>	Inhibit caffeine metabolism → prolonged caffeine half-life and toxicity risk
Antidepressants (SSRIs)	<i>Fluvoxamine</i>	Potent CYP1A2 inhibitor → markedly increased caffeine levels
Antipsychotics	<i>Clozapine, olanzapine, haloperidol</i>	Caffeine increases plasma drug levels (up to 97% for clozapine)
Melatonin	<i>Melatonin</i>	C _{max} increased by 142% and AUC by 120%
Oral contraceptives	<i>Combined OCs</i>	Double caffeine half-life → increased caffeine sensitivity
Cardiovascular drugs	<i>Mexiletine, verapamil, propranolol</i>	Slowed metabolism of both caffeine and the drug
Non-BZD hypnotic	<i>Zolpidem</i>	C _{max} /AUC modestly increased by 30-40%; caffeine only incompletely reverses sedation

Carrillo, 2000; Radandt, 1992; Guo, 2021; van Dam, 2020; Belayneh, 2020; Härtter, 2003; Cysneiros, 2007