

Drug / Herb Therapeutic Regimen — Summary Table

Drug / Herb	Category (Rx / OTC / Botanical)	Primary Action / Mechanism	Purpose / Indication	Typical Duration of Action*	Typical Dose / Use Pattern*	Key Nutrition Implications	Key Safety / Interaction Notes
Metformin	Prescription	↓ hepatic gluconeogenesis, ↑ insulin sensitivity	Type 2 diabetes, insulin resistance	~12–24 hrs	500–2000 mg/day divided	↓ B12 absorption	Monitor B12; GI effects common
Insulin (basal)	Prescription	Replaces endogenous insulin	Type 1 & advanced T2D	24–42 hrs (type dependent)	Individualized	Hypoglycemia risk	Carb timing critical
Statin	Prescription	Inhibits HMG-CoA reductase	Dyslipidemia, CVD prevention	24 hrs	Agent-specific	↓ CoQ10	Myalgias; grapefruit interaction (some)
ACE inhibitor	Prescription	↓ angiotensin II	Hypertension, CKD	12–24 hrs	Agent-specific	↑ potassium	Monitor K ⁺ , kidney function
Levothyroxine	Prescription	Synthetic T4	Hypothyroidism	~7 days	Individualized	Needs iodine, selenium	Take away from Ca/Fe
SSRI	Prescription	↑ synaptic serotonin	Depression, anxiety	24 hrs (steady state weeks)	Agent-specific	Appetite/weight changes	Avoid St. John’s wort
NSAID	OTC/Rx	COX inhibition	Pain, inflammation	4–12 hrs	Short-term use	GI irritation	Bleeding risk
Oral contraceptive	Prescription	Hormonal suppression	Birth control	24 hrs	Daily	↓ folate, B6	Enzyme inducers reduce efficacy
Vitamin D	Supplement	↑ Ca absorption, immune modulation	Deficiency, bone health	Weeks (fat-soluble)	800–4000 IU/day	Needs Mg	Monitor 25-OH-D
Calcium citrate	Supplement	Bone mineralization	Bone health, stones (with meals)	Hours	500–600 mg/dose	Competes with Fe/Zn	Take away from iron
Magnesium glycinate	Supplement	Neuromuscular relaxation	Stress, constipation	Hours	200–400 mg/day	Supports glucose control	Diarrhea at high dose
Iron (ferrous)	Supplement	↑ hemoglobin synthesis	Iron deficiency anemia	Hours–days	18–65 mg elemental	Needs vitamin C	Separate from Ca
Omega-3 (EPA/DHA)	Supplement	Anti-inflammatory	Dyslipidemia, inflammation	Days	1–3 g/day	Fat-soluble	Bleeding risk w/ anticoagulants
Probiotic	Supplement	Microbiome modulation	GI support	Transient	Strain-specific	Fiber synergy	Avoid in immunocompromised
Berberine	Botanical	AMPK activation, antimicrobial	IR, dysbiosis (adjunct)	4–6 hrs	500 mg 2–3×/day	↓ glucose	Additive w/ hypoglycemics
Turmeric (curcumin)	Botanical	NF-κB inhibition	Inflammation (adjunct)	Hours	500–1000 mg/day	Antioxidant	Bleeding risk high dose
Ashwagandha	Botanical	HPA axis modulation	Stress, fatigue	Days	300–600 mg/day	Thyroid effects	Avoid hyperthyroid
Garlic (high dose)	Botanical	Antiplatelet, lipid effects	CV support	Hours–days	600–1200 mg/day	Sulfur compounds	Bleeding risk
St. John’s wort	Botanical	CYP enzyme induction	Mood (self-use common)	Days	Variable	↓ drug levels	Avoid w/ SSRIs, OCPs

