

Chapter 71

Interactions by Drug Class

Evidenced and Preliminary/Speculative

5-Alpha (5 α)-Reductase Inhibitors: Black Cohosh, Saw Palmetto

5-Hydroxytryptamine Receptor Agonists (Tryptans): 5-HTP, Feverfew

Alpha-1-Adrenoceptor Antagonists: Saw Palmetto, Vitamin B₃

Alpha-Glucosidase Inhibitors: Chromium, Vitamin B₃

Aminoglycoside Antibiotics: Alpha-Lipoic Acid, Calcium, Eleuthero, Ginger, Ginkgo, Horse Chestnut, Licorice, Magnesium, Potassium, Probiotic Intestinal Flora, Vitamin B₁, Vitamin B₆, Vitamin B₁₂, Vitamin K

Aminosalicylates: Vitamin B₁₂

Amphetamines: 5-HTP, Magnesium, Omega-3 Fatty Acids, Vitamin B₆, Zinc

Anabolic Steroids: Echinacea

Androgens: DHEA, Zinc

Anesthesia, General: Alpha-Lipoic Acid, Ephedra, Ginger, Ginkgo, Milk Thistle, St. John's Wort, Valerian

Angiotensin II Receptor Antagonists: Alpha-Lipoic Acid, Potassium

Angiotensin-Converting Enzyme (ACE) Inhibitors: Arginine, Cayenne, Iron, Omega-3 Fatty Acids, Potassium, Vitamin E, Zinc

Antacids (Generally): Calcium, Cayenne, Chromium, Copper, Folic Acid, Iron, Vitamin A, Vitamin B₁, Vitamin D, Zinc

Antacids, Calcium-Based Antacids: Zinc

Antacids, Magnesium-Containing Antacids: Magnesium

Anthelmintic Drugs: Beta-Carotene, Vitamin A

Antiarrhythmic Drugs: Cascara, Magnesium, Potassium

Antibiotic Combination Drugs: Licorice, Probiotic Intestinal Flora, Vitamin K, Zinc

Antibiotics, Systemic: Echinacea, Inositol, Licorice, Probiotic Intestinal Flora, Vitamin A, Vitamin B₁, Vitamin B₂, Vitamin B₁₂, Vitamin K, Zinc

Antibiotics, Topical: Zinc

Anticoagulants (Generally): Cayenne, Melatonin, *S*-Adenosylmethionine (SAME), Turmeric (Curcumin)

Anticoagulants, Heparin, Unfractionated: Cayenne, Chondroitin Sulfate, DHEA, Policosanol, Vitamin C, Vitamin D

Anticoagulants, Heparinoids: Cayenne, Chondroitin Sulfate, DHEA, Policosanol

Anticoagulants, Low-Molecular-Weight Heparins: Cayenne, Chondroitin Sulfate, DHEA, Policosanol, Vitamin C

Anticoagulants, Oral Vitamin K Antagonist Anticoagulants: Bilberry, Cayenne, Chondroitin Sulfate, Coenzyme Q10, Dang Gui, Devil's Claw, DHEA, Feverfew, Garlic, Ginger, Ginkgo, Ginseng, Green Tea, Horse Chestnut, Kava, Licorice, Magnesium, Omega-3 Fatty Acids, Policosanol, Red Clover, Reishi, Saw Palmetto, St. John's Wort, Vitamin A, Vitamin B₃, Vitamin C, Vitamin E, Vitamin K, Zinc

Anticoagulants, Thrombin Inhibitors, Hirudins: Cayenne, DHEA, Policosanol

Anticonvulsant Medications (Antiepileptic Drugs): Calcium, Copper, DHEA, Folic Acid, Ginkgo, Inositol, Kava, Milk Thistle, Omega-3 Fatty Acids, Valerian, Vitamin A, Vitamin B₁, Vitamin B₂, Vitamin B₃, Vitamin B₆, Vitamin B₁₂, Vitamin C, Vitamin D, Vitamin E, Vitamin K, Vitex, Zinc

Antifungal Agents (Generally): Echinacea

Antihypertensive Medications (Generally): Omega-3 Fatty Acids, Vitamin C

Antimalarial Drugs: Vitamin B₂

Antimicrobials/Antibiotics, Miscellaneous: Licorice, Probiotic Intestinal Flora, Vitamin K, Zinc

Antiparkinsonian Medications: Folic Acid, Iron, S-Adenosylmethionine (S-AMe), Vitamin B₆, Vitex

Antiplatelet Thromboprophylactics: Bilberry, Cayenne, Feverfew, Garlic, Ginger, Ginkgo, Omega-3 Fatty Acids, Policosanol, S-Adenosylmethionine (S-AMe)

Antiplatelets, Monoclonal Antibody Antiplatelet Agents: Cayenne, Ginger, Policosanol, S-Adenosylmethionine (S-AMe)

Antipsychotics (Neuroleptic Agents): Chromium, Ginkgo, Kava, Melatonin, Vitamin B₆, Vitamin C

Antiretroviral Agents, Reverse-Transcriptase Inhibitors (Nonnucleoside; NNRTIs): St. John's Wort, Vitamin B₂

Antiretroviral Agents, Reverse-Transcriptase Inhibitors (Nucleoside; NRTIs): Aloe, Carnitine, Coenzyme Q10, DHEA, Reishi, Vitamin B₁, Vitamin B₂, Vitamin B₁₂, Zinc

Antitubercular Agents: Folic Acid, Milk Thistle, Vitamin B₆, Vitamin C

Arachidonic Acid Cascade Inhibitors: Vitamin A

Atypical Antipsychotics: 5-HTP, Chromium, Echinacea, Ginkgo, Melatonin, Omega-3 Fatty Acids, Vitamin B₃, Vitamin B₆, Vitamin C

Barbiturates: DHEA, Gotu Kola, Valerian, Vitamin B₂

Benzodiazepines: DHEA, Gotu Kola, Melatonin, Valerian, Vitamin B₃

Beta-1-Adrenoceptor Agonists (Beta-1-Adrenergic Blocking Agents; Systemic): Calcium, Carnitine, Chromium, Coenzyme Q10, Folic Acid, Magnesium, Melatonin, Potassium, Vitamin B₂, Vitamin B₃, Vitamin B₆, Vitamin C

Beta-2-Adrenoceptor Agonists (Beta-2-Adrenergic Blocking Agents): Calcium, Magnesium, Potassium

Beta-Lactam Antibiotics: Ginseng, Licorice, Probiotic Intestinal Flora, Vitamin B₁, Vitamin K, Zinc

Biguanides: Alpha-Lipoic Acid, Astragalus, Bilberry, Calcium, Chromium, DHEA, Ephedra, Folic Acid, Garlic, Ginkgo, Ginseng, Glucosamine Sulfate,

Gotu Kola, Horse Chestnut, Magnesium, Omega-3 Fatty Acids, Reishi, Turmeric (Curcumin), Vitamin B₃, Vitamin B₁₂

Bile Acid Sequestrants: Beta-Carotene, Calcium, Folic Acid, Iron, Omega-3 Fatty Acids, Vitamin A, Vitamin B₂, Vitamin B₃, Vitamin D, Vitamin E, Vitamin K, Zinc

Biological Response Modifiers (TNF- α Antagonists): Echinacea

Bisphosphonates: Calcium, Iron, Magnesium, Vitamin D, Zinc

Blood Viscosity–Reducing Agents: Cayenne, Policosanol

Butyrophenone Neuroleptics: Milk Thistle, Phenylalanine

Calcium Channel Blockers: Calcium, Carnitine, Folic Acid, Magnesium, St. John's Wort, Vitamin B₆, Vitamin D

Carbonic Anhydrase Inhibitors: Potassium

Cardiac Glycosides: Calcium, Cascara, Dang Gui, Eleuthero, Ephedra, Hawthorn, Licorice

Cephalosporin Antibiotics: Ginseng, Green Tea, Iron, Licorice, Probiotic Intestinal Flora, Reishi, Vitamin B₁, Vitamin K, Zinc

Chemotherapy (Various Cytotoxic Agents): Aloe, Eleuthero, Ginseng, Licorice, Omega-3 Fatty Acids, Vitamin A, Vitamin C, Vitamin E

Chemotherapy and Radiotherapy (Generally): Aloe, Ginseng, Melatonin, PABA, Reishi, Vitamin C, Vitamin E

Chemotherapy, Alkylating Agents: Astragalus, Carnitine, Echinacea, Eleuthero, Selenium

Chemotherapy, Anthracyclines: Alpha-Lipoic Acid, Carnitine, Coenzyme Q10, Garlic, Ginkgo, Green Tea, Hawthorn, Milk Thistle, Reishi, Selenium, Turmeric (Curcumin), Vitamin B₂, Vitamin E

Chemotherapy, Antimetabolites: Echinacea, Eleuthero, Folic Acid, Vitamin B₁

Chemotherapy, Aromatase Inhibitor Hormonal Anticancer Therapies: Green Tea

Chemotherapy, Cytotoxic Antibiotics: Echinacea, Eleuthero, Ginseng, Licorice, Probiotic Intestinal Flora, Vitamin B₁, Vitamin K

Chemotherapy, Estrogens: Black Cohosh

Chemotherapy, GnRH Antagonists/LHRH Antagonists: Black Cohosh

Chemotherapy, LHRH Agonists: Black Cohosh, Vitamin D

Chemotherapy, Mitotic Inhibitors: Echinacea, Eleuthero, St. John's Wort

Chemotherapy, Topoisomerase II Inhibitors: St. John's Wort

Corticosteroids, Oral: Calcium, Cayenne, Chromium, DHEA, Echinacea, Ephedra, Folic Acid, Horse Chestnut, Licorice, Magnesium, Melatonin, Omega-3 Fatty Acids, Potassium, Selenium, Vitamin A, Vitamin B₆, Vitamin C, Vitamin D, Vitamin K, Zinc

Corticosteroids, Topical: Aloe, Green Tea, Licorice, Vitamin C

COX-1 Inhibitors (NSAIDs): Calcium, Cayenne, Chondroitin Sulfate, Chromium, Copper, Devil's Claw, Feverfew, Folic Acid, Ginger, Glucosamine Sulfate, Gotu Kola, Iron, Licorice, Melatonin, Omega-3 Fatty Acids, Potassium, Turmeric (Curcumin), Vitamin B₃, Vitamin B₆, Vitamin C, Zinc

COX-2 Inhibitors (NSAIDs): Calcium, Cayenne, Chondroitin Sulfate, Chromium, Copper, Devil's Claw, Feverfew, Folic Acid, Ginger, Glucosamine

Sulfate, Gotu Kola, Iron, Licorice, Melatonin, Omega-3 Fatty Acids, Potassium, Turmeric (Curcumin), Vitamin B₃, Vitamin C, Zinc

Cytochrome P450 1A2 Isoenzyme Substrates: Echinacea, Melatonin

Cytochrome P450 2C9 Isoenzyme Substrates: Melatonin

Cytochrome P450 3A4 Isoenzyme Substrates: Echinacea, Vitamin E

Diuretics, Combination Drugs: Glucosamine Sulfate, Hawthorn, Licorice, Magnesium, Potassium, Vitamin D, Zinc

Erythropoiesis-Stimulating Agents: Dang Gui, Iron, Vitamin B₆, Vitamin C

Estrogen-Containing and Synthetic Estrogen Analog Medications: Arginine, Black Cohosh, Boron, Calcium, Copper, Dang Gui, DHEA, Magnesium, Melatonin, Milk Thistle, St. John's Wort, Vitamin B₆, Vitamin D, Vitamin E, Vitex, Zinc

Fibrates: Coenzyme Q10, Copper, Folic Acid, Gotu Kola, Omega-3 Fatty Acids, Vitamin B₃, Vitamin B₆, Vitamin B₁₂, Zinc

Fluoroquinolone (4-Quinolone) Antibiotics: Calcium, Green Tea, Iron, Licorice, Magnesium, Potassium, Probiotic Intestinal Flora, Vitamin B₁, Vitamin K, Zinc

GABA Analogs: Vitamin B₃

Ganglionic Blocking Agents: Vitamin B₃

Glucocorticoids, Systemic: See *Corticosteroids, Oral*.

Halogenated Inhalational Anesthetic Agents: Alpha-Lipoic Acid, Ephedra, Milk Thistle, St. John's Wort, Valerian

Histamine (H₂) Receptor Antagonists: Calcium, Chromium, Copper, Folic Acid, Iron, Licorice, Magnesium, Vitamin B₁₂, Vitamin C, Zinc

HMG-CoA Reductase Inhibitors (Statins): Beta-Carotene, Carnitine, Coenzyme Q10, Garlic, Gotu Kola, Omega-3 Fatty Acids, Policosanol, Reishi, Selenium, St. John's Wort, Vitamin A, Vitamin B₃, Vitamin C, Vitamin E

Hormone Replacement Therapy, Estrogen/Progestin Combinations: Arginine, Black Cohosh, Boron, Calcium, Copper, Dang Gui, DHEA, Magnesium, Melatonin, Milk Thistle, St. John's Wort, Vitamin B₆, Vitamin D, Vitamin E, Vitex, Zinc

Hormone Replacement Therapy, Estrogen/Testosterone Combinations: Black Cohosh, Boron, Calcium, Copper, Dang Gui, DHEA, Magnesium, Melatonin, Milk Thistle, St. John's Wort, Vitamin B₆, Vitamin D, Vitamin E, Vitex, Zinc

Hormone Replacement Therapy, Estrogens: Arginine, Black Cohosh, Boron, Calcium, Copper, Dang Gui, DHEA, Magnesium, Melatonin, Milk Thistle, St. John's Wort, Vitamin B₆, Vitamin D, Vitamin E, Vitex, Zinc

Hormone Replacement Therapy, Progesterone: Vitamin D

Hormone Replacement Therapy, Progestins: Vitamin D

Imidazole Antibiotics: Probiotic Intestinal Flora, Vitamin B₂

Immunosuppressants (Generally): Echinacea

Laxatives (Generally): Licorice

Laxatives, Bulk-Forming Laxative Agents: Potassium, Vitamin B₂

Laxatives, Fast-Acting Laxative Agents: Potassium

Laxatives, Prescription Laxative Agents: Potassium

Laxatives, Stimulant: Calcium

Loop Diuretics: Calcium, Folic Acid, Ginseng, Glucosamine Sulfate, Licorice, Magnesium, Potassium, Vitamin B₁, Vitamin B₆, Vitamin C, Zinc

Macrolide Antibiotics: Calcium, Green Tea, Magnesium, Probiotic Intestinal Flora, Vitamin B₁, Vitamin B₆, Vitamin K, Zinc

Meglitinide Analog Oral Hypoglycemics: Chromium, Vitamin B₃

Mixed Alpha-1/Beta- Adrenoceptor Antagonists: Potassium

Monoamine Oxidase A (MAO-A) Inhibitors: 5-HTP, Cayenne, Chromium, Eleuthero, Ephedra, Ginkgo, Ginseng, Licorice, Phenylalanine, S-Adenosylmethionine (SAME), St. John's Wort, Tryptophan, Tyrosine, Vitamin B₆

Monoamine Oxidase B (MAO-B) Inhibitors: 5-HTP, Cayenne, Chromium, Eleuthero, Ephedra, Ginkgo, Kava, Licorice, Phenylalanine, S-Adenosylmethionine (SAME), St. John's Wort, Tryptophan, Tyrosine

Narcotic Analgesics (Opioids): Ephedra, Ginseng, Gotu Kola, Phenylalanine, Tyrosine

Neuromuscular Blocking Agents: Magnesium

Nitrates: Arginine, Carnitine, Folic Acid, Vitamin C

Nitrofurantoin Antibiotics: Licorice

Nitroimidazole Antiprotozoals: Milk Thistle

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs): See *COX-1 Inhibitors (NSAIDs)* or *COX-2 Inhibitors (NSAIDs)*.

Nucleic Acid Synthesis Inhibitors, Antiviral: S-Adenosylmethionine (SAME)

Oral Contraceptives (Synthetic Estrogen and Progesterone Analogues):

Arginine, Calcium, Copper, Dang Gui, DHEA, Folic Acid, Iron, Licorice, Magnesium, Melatonin, Milk Thistle, S-Adenosylmethionine (SAME), Selenium, St. John's Wort, Tyrosine, Vitamin A, Vitamin B₁, Vitamin B₂, Vitamin B₃, Vitamin B₆, Vitamin B₁₂, Vitamin C, Vitamin E, Vitex, Zinc

Oral Hypoglycemic Agents, Combination Drugs: DHEA, Ginkgo, Glucosamine Sulfate, Omega-3 Fatty Acids

Oral Hypoglycemic Agents: Aloe, Alpha-Lipoic Acid, Astragalus, Bilberry, Chromium, Coenzyme Q10, DHEA, Ephedra, Garlic, Ginkgo, Ginseng, Glucosamine Sulfate, Gotu Kola, Horse Chestnut, Magnesium, Omega-3 Fatty Acids, Reishi, Turmeric (Curcumin), Vitamin B₃

Penicillin Antibiotics: Ginseng, Green Tea

Peripheral Adrenergic Blocking Agents: Ephedra

Phenothiazines: Coenzyme Q10, Milk Thistle, Vitamin B₂, Vitamin B₃, Vitamin C

Phosphodiesterase-5 Inhibitors: Arginine

Photosensitizing Agents: St. John's Wort

Pivalate Prodrugs: Carnitine

Potassium-Sparing Diuretics: Arginine, Calcium, Folic Acid, Glucosamine Sulfate, Magnesium, Zinc

Progestin Oral Contraceptives, Implants, and Postcoital Contraceptives: Magnesium, St. John's Wort

Progestin-Estrogen Injectable Contraceptives: Magnesium

Progestins/Progesterone Analogs: Vitex; see Hormone Replacement Therapy, Estrogen/Progestin Combinations

Protease Inhibitors: Copper, Garlic, St. John's Wort, Vitamin C

Proton Pump Inhibitors: Beta-Carotene, Calcium, Chromium, Iron, Kava, St. John's Wort, Vitamin B₁₂, Zinc

Purine Nucleoside Analog Antivirals: Astragalus

Quinolone Antibiotics: See *Fluoroquinolone (4-Quinolone) Antibiotics*.

Retinoids: Beta-Carotene, Calcium, Carnitine, Vitamin A, Vitamin E

Salicylates: Calcium, Omega-3 Fatty Acids, Policosanol, Vitamin K

Secale Alkaloids: Ephedra

Sedative-Hypnotics: Gotu Kola, Melatonin, Valerian

Selective Estrogen Receptor Modulators (SERMs): Black Cohosh, Dang Gui, Green Tea

Selective Serotonin Reuptake Inhibitor (SSRI) Antidepressants: Chromium, Ginkgo, Inositol, Omega-3 Fatty Acids, *S*-Adenosylmethionine (SAME), St. John's Wort, Tryptophan, Vitamin B₃, Vitamin B₆, Vitamin B₁₂, Vitamin C, Zinc

Selective Serotonin Reuptake Inhibitor/Serotonin-Norepinephrine Reuptake Inhibitor (SSRI/SNRI) Antidepressants: 5-HTP, Ginkgo, Omega-3 Fatty Acids, *S*-Adenosylmethionine (SAME), St. John's Wort, Tryptophan, Vitamin B₃, Vitamin B₆, Vitamin B₁₂

Serotonin Agonists: 5-HTP, Tryptophan

Stimulant Medications: 5-HTP; Magnesium, Omega-3 Fatty Acids, Potassium, Reishi, Tyrosine, Vitamin B₆, Vitamin C, Zinc

Stool Softeners: Potassium

Sulfonamide Antibiotics: Calcium, Folic Acid, Licorice, Magnesium, PABA, Probiotic Intestinal Flora, Vitamin B₁, Vitamin B₆, Vitamin K, Zinc

Sulfonylurea Oral Hypoglycemics: Aloe, Alpha-Lipoic Acid, Astragalus, Bilberry, Chromium, Coenzyme Q10, DHEA, Ephedra, Garlic, Ginkgo, Ginseng, Glucosamine Sulfate, Gotu Kola, Horse Chestnut, Magnesium, Omega-3 Fatty Acids, Reishi, Turmeric (Curcumin), Vitamin B₃

Surgery (Generally): Garlic, Ginkgo, St. John's Wort

Tetracycline Antibiotics: Calcium, Folic Acid, Iron, Magnesium, Potassium, Vitamin A, Vitamin B₁, Vitamin B₂, Vitamin B₃, Vitamin B₆, Vitamin C, Zinc

Thiazide Diuretics: Calcium, Coenzyme Q10, Folic Acid, Ginkgo, Glucosamine Sulfate, Hawthorn, Licorice, Magnesium, Potassium, Vitamin B₂, Vitamin D, Zinc

Thiazide-like Diuretics: Glucosamine Sulfate, Potassium

Thiazolidinediones (Glitazones): Chromium, Vitamin B₃

Thrombolytic Agents: Astragalus

Thyroid Hormones: Alpha-Lipoic Acid, Calcium, Carnitine, Coenzyme Q10, DHEA, Iron, Tyrosine, Vitamin B₂

Triazolobenzodiazepines: Kava, St. John's Wort

Tricyclic Antidepressants: 5-HTP, Coenzyme Q10, Milk Thistle, *S*-Adenosylmethionine (SAME), St. John's Wort, Tryptophan, Tyrosine, Vitamin B₁, Vitamin B₂, Vitamin B₃, Vitamin B₆, Vitamin B₁₂, Zinc

Urinary pH Modifiers: Ephedra

Vaccine Immunotherapies: Ginseng

Vitamin B₆-Depleting Drugs: Melatonin