

<p>ORAL CONTRACEPTIVES</p>	<ul style="list-style-type: none"> • Folate • Vitamin B1 • Vitamin B2 • Vitamin B3 • Vitamin B6 • Vitamin B12 • Vitamin C • Vitamin E • Magnesium • Selenium • Zinc • Tyrosine, Tryptophan • Coenzyme Q10 • Microbiome 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks • Nerve, GI, cardiovascular problems & depression • Problems with skin, eyes, mucous membranes and nerves • Skin, gastrointestinal and nervous system problems • Depression, sleep problems, ↑ homocysteine & heart disease • Anemia, tiredness, ↑ homocysteine & heart disease risks • Lowered immune system, easy bruising, poor wound healing • Neurological disorders, ↑ free radical damage, ↓ immunity ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps • Lower immunity, reduced antioxidant protection • Slow wound healing, loss of smell & taste, lower immunity • apathy, blood sugar imbalances, fatigue, anxiety and depression • ↑ Blood pressure, ↑ mitochondrial DNA damage ↓ energy, • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES • See NOTES: Postbiotic Metabolites-Rapid Microbiome Restoration
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<p>ACID BLOCKERS Rx/OTC Proton Pump Inhibitors</p> <ul style="list-style-type: none"> • Aciphex, rabeprazole • Dexilant, dexlansoprazole • Nexium, esomeprazole • Prevacid, lansoprazole • Prilosec, omeprazole • Protonix, pantoprazole 	<ul style="list-style-type: none"> • Vitamin B-12 • Magnesium • Microbiome 	<ul style="list-style-type: none"> • Anemia, tiredness, ↑ homocysteine & heart disease risks • ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps • See NOTES: Postbiotic Metabolites-Rapid Microbiome Restoration
<p>H2 Receptor Antagonists</p> <ul style="list-style-type: none"> • Axid, nizatidine • Pepcid, famotidine • Tagamet, cimetidine • Zantac, ranitidine 	<ul style="list-style-type: none"> • Vitamin B-12 • Vitamin D • Folate • Calcium • Iron • Zinc • Microbiome 	<ul style="list-style-type: none"> • Anemia, tiredness, ↑ homocysteine & heart disease risks • ↓ immunity, osteoporosis, muscle weakness, hearing loss • Birth defects, anemia, ↑ homocysteine & heart disease risks • Osteoporosis, ↑ tooth decay, muscle spasms, memory loss • Anemia, weakness, fatigue, hair loss, brittle nails • Slow wound healing, loss of smell & taste, lower immunity • See NOTES: Postbiotic Metabolites-Rapid Microbiome Restoration

<p>AMPHETAMINES</p> <ul style="list-style-type: none"> • Desoxyn, methamphetamine • Adderall, d-amphetamine 	<ul style="list-style-type: none"> • Glutathione 	<ul style="list-style-type: none"> • See Notes on <i>Lactobacillus fermentum</i> ME-3, which is the most effective way to boost glutathione levels on a daily basis.
<p>ANTI-ANXIETY DRUGS</p> <ul style="list-style-type: none"> • Benzodiazepines • Ativan, lorazepam • Klonopin, clonazepam • Restoril, temazepam • Valium, diazepam • Xanax, alprazolam 	<ul style="list-style-type: none"> • Melatonin 	<ul style="list-style-type: none"> • Only studies on diazepam and alprazolam document suppression of nocturnal melatonin
<p>ANTIBIOTICS</p>	<ul style="list-style-type: none"> • B Vitamins • Vitamin K • Aromatic amino acids • Microbiome 	<ul style="list-style-type: none"> • Antibiotics kill bacteria that synthesize B-vitamins, vitamin K, tryptophan, tyrosine and phenylalanine • Depression, anxiety, mood disorders • See NOTES: Postbiotic Metabolites-Rapid Microbiome Restoration Oral antibiotics kill good bacteria; increases GI problems, intestinal permeability, auto-immune diseases; links to autism, ADHD and many other health problems.

<p>ANTICONVULSANTS</p> <ul style="list-style-type: none"> • Phenobarbital & Barbiturates 	<ul style="list-style-type: none"> • Vitamin D • Vitamin K • Calcium • Folate • Biotin • Vitamin B12 	<ul style="list-style-type: none"> • ↓ immunity, osteoporosis, muscle weakness, hearing loss • ↑ bruising & bleeding, ↓ bone strength, ↑ osteoporosis risk • Osteoporosis, ↑ tooth decay, muscle spasms, memory loss • Birth defects, anemia, ↑ homocysteine & heart disease risks • Hair loss, dermatitis, depression, cardiac irregularities • Anemia, tiredness, ↑ homocysteine & heart disease risks
<ul style="list-style-type: none"> • Dilantin, phenytoin 	<ul style="list-style-type: none"> • Vitamin D • Calcium • Folate • Vitamin K • Vitamin B-1 • Vitamin B-12 • Biotin 	<ul style="list-style-type: none"> • ↓ immunity, osteoporosis, muscle weakness, hearing loss • Osteoporosis, ↑ tooth decay, muscle spasms, memory loss • Birth defects, anemia, ↑ homocysteine & heart disease risks • ↑ risks bruising & bleeding, ↓ bone strength, ↑ osteoporosis • Nerve, GI, cardiovascular problems & depression • Anemia, tiredness, ↑ homocysteine & cardiovascular disease • Hair loss, dermatitis, depression, cardiac irregularities
<ul style="list-style-type: none"> • Depakane, divalproex 	<ul style="list-style-type: none"> • Folate • Carnitine • Copper • Selenium • Zinc 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks • Muscle weakness, cramps, fatigue • Anemia, fatigue, cardiovascular & connective tissue problems • Lower immunity, reduced antioxidant protection • Slow wound healing, loss of smell & taste, lower immunity

<p>ANTICONVULSANTS</p> <ul style="list-style-type: none"> • Mysoline, primidone 	<ul style="list-style-type: none"> • Vitamin D • Vitamin K • Folate • Biotin • Calcium 	<ul style="list-style-type: none"> • ↓ immunity, osteoporosis, muscle weakness, hearing loss • ↑ risks bruising & bleeding, ↓ bone strength, ↑ osteoporosis • Birth defects, cervical dysplasia, anemia, ↑ heart disease risks • Hair loss, dermatitis, depression, cardiac irregularities • Osteoporosis, ↑ tooth decay, muscle spasms, memory loss
<ul style="list-style-type: none"> • Neurontin, gabapentin 	<ul style="list-style-type: none"> • Folate 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks
<ul style="list-style-type: none"> • Tegretol, carbamazepine 	<ul style="list-style-type: none"> • Folate • Vitamin D • Biotin 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks • ↓ immunity, osteoporosis, muscle weakness, hearing loss • Hair loss, dermatitis, depression, cardiac irregularities
<ul style="list-style-type: none"> • Trileptal, oxcarbamazepine 	<ul style="list-style-type: none"> • Sodium • Folate 	<ul style="list-style-type: none"> • Muscle weakness, dehydration, poor concentration, ↓ appetite • Birth defects, anemia, ↑ homocysteine & heart disease risks

<p>ANTIDEPRESSANTS MAO INHIBITORS</p> <ul style="list-style-type: none"> • Nardil, phenelzine 	<ul style="list-style-type: none"> • Vitamin B6 	<ul style="list-style-type: none"> • Depression, sleep problems, ↑ homocysteine & heart disease
<ul style="list-style-type: none"> • SSRIs • Celexa, citalopram • Lexapro, escitalopram • Paxil, paroxetine • Prozac, fluoxetine • Zoloft, sertraline 	<ul style="list-style-type: none"> • Melatonin • Sodium 	<ul style="list-style-type: none"> • Sleep problems • Headache, nausea, vomiting, muscle cramps, fatigue
<p>TRICYCLIC ANTIDEPRESSANTS</p> <ul style="list-style-type: none"> • Elavil, amitriptyline • Pamela, nortriptyline • Tofranil, Imipramine, etc. 	<ul style="list-style-type: none"> • Vitamin B-2 • Coenzyme Q10 	<ul style="list-style-type: none"> • Problems with skin, eyes, mucous membranes and nerves • ↑ Blood pressure, ↑ mitochondrial DNA damage ↓ energy, • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES

<p>ANTI-HYPERTENSIVES ACE Inhibitors</p> <ul style="list-style-type: none"> • Capoten, captopril, • Vasotec, enalapril • Altace, ramipril • Prinival, lisinopril 	<ul style="list-style-type: none"> • Zinc 	<ul style="list-style-type: none"> • Slow wound healing, ↓ sense of smell & taste, lower immunity
<p>Adrenergic Stimulants</p> <ul style="list-style-type: none"> • Catapres, clonidine • Aldomet, methyldopa 	<ul style="list-style-type: none"> • Coenzyme Q10 	<ul style="list-style-type: none"> • blood pressure, ↑ mitochondrial DNA damage ↓ energy, • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES
<p>Calcium Channel Blockers</p> <ul style="list-style-type: none"> • Calan, verapamil • Cardizem, diltiazem • Norvasc, amlodipine • Plendil, felodipine • Procardia, nifedipine 	<ul style="list-style-type: none"> • Potassium 	<ul style="list-style-type: none"> • Irregular heart beat, muscle weakness, fatigue, edema

<p>ANTI-HYPERTENSIVES</p> <ul style="list-style-type: none"> Hygroton, chlorthalidone 	<ul style="list-style-type: none"> Zinc Magnesium 	<ul style="list-style-type: none"> Slow wound healing, ↓ sense of smell & taste, lower immunity ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps
<p>Loop Diuretics</p> <ul style="list-style-type: none"> Lasix, furosemide Bumex, bumetanide Edecrin, ethacrynic acid Demadex, torsemide 	<ul style="list-style-type: none"> Calcium Magnesium Vitamin B-1 Vitamin B-6 Potassium Zinc 	<ul style="list-style-type: none"> Osteoporosis, ↑ tooth decay, muscle spasms, memory loss ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps Nerve, GI, cardiovascular problems & depression Depression, sleep problems, ↑ homocysteine & heart disease Irregular heart beat, muscle weakness, fatigue, edema Slow wound healing, ↓ sense of smell & taste, lower immunity
<p>Potassium Sparing Diuretics</p> <ul style="list-style-type: none"> Dyazide, Maxzide Triamterene 	<ul style="list-style-type: none"> Calcium Folate Zinc 	<ul style="list-style-type: none"> Osteoporosis, ↑ tooth decay, muscle spasms, memory loss Birth defects, anemia, ↑ homocysteine & heart disease risks Slow wound healing, ↓ sense of smell & taste, ↓ immunity
<p>Thiazide Diuretics</p> <ul style="list-style-type: none"> Hydrochlorothiazide Esidrix, Diuril, Zaroxolyn + others 	<ul style="list-style-type: none"> Magnesium Potassium Zinc Coenzyme Q10 	<ul style="list-style-type: none"> ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps Irregular heart beat, muscle weakness, fatigue, edema Slow wound healing, ↓ sense of smell & taste, lower immunity ↑ Blood pressure, ↑ mitochondrial DNA damage ↓ energy, ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES
<p>Vasodilators</p> <ul style="list-style-type: none"> Apresoline, hydralazine 	<ul style="list-style-type: none"> Vitamin B-6 Coenzyme Q10 	<ul style="list-style-type: none"> Depression, sleep problems, ↑ homocysteine & heart disease blood pressure, ↑ mitochondrial DNA damage ↓ energy, ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES

<p>ANTI-INFLAMMATORIES</p> <ul style="list-style-type: none"> • Azulfadine, sulfasalazine 	<ul style="list-style-type: none"> • Folate 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks
<p>Corticosteroids</p> <ul style="list-style-type: none"> • Decadron, dexamethasone • Aristocort, triamcinolone • Cortef, hydrocortisone • Prednisone 	<ul style="list-style-type: none"> • Calcium • Potassium • Selenium • Zinc • Vitamin B-6 • Vitamin C • Folate • Microbiome 	<ul style="list-style-type: none"> • Osteoporosis, ↑ tooth decay, muscle spasms, memory loss • Irregular heart beat, muscle weakness, fatigue, edema • Lower immunity, reduced antioxidant protection • Slow wound healing, ↓ sense of smell & taste, lower immunity • Depression, sleep problems, ↑ homocysteine & heart disease • Lowered immune system, easy bruising, poor wound healing • Birth defects, anemia, ↑ homocysteine & heart disease risks • See NOTE: Postbiotic Metabolites-Rapid Microbiome Restoration
<p>Gout Medications</p> <ul style="list-style-type: none"> • Colchicine, Col-benemid 	<ul style="list-style-type: none"> • Vitamin B-12 • Potassium • Sodium • Beta-carotene 	<ul style="list-style-type: none"> • Anemia, tiredness, ↑ homocysteine & cardiovascular disease • Irregular heart beat, muscle weakness, fatigue, edema • Muscle weakness, dehydration, poor concentration, ↓ appetite • Lower immunity, reduced antioxidant protection
<ul style="list-style-type: none"> • Indocin, indomethacin 	<ul style="list-style-type: none"> • Vitamin C • Folate • Iron 	<ul style="list-style-type: none"> • Lowered immune system, easy bruising, poor wound healing • Birth defects, anemia, ↑ homocysteine & heart disease risks • Anemia, weakness, fatigue, hair loss, brittle nails
<p>NSAIDs</p> <ul style="list-style-type: none"> • Motrin, Ibuprofen • Naprosyn, naproxen 	<ul style="list-style-type: none"> • Folate • Melatonin • Microbiome 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks • Sleep problems • See NOTE: Postbiotic Metabolites-Rapid Microbiome Restoration

<p>ANTI-PARKINSON MEDS L-DOPA</p>	<ul style="list-style-type: none"> • Folate • Vitamin B12 • Potassium • SAME 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks • Anemia, tiredness, ↑ homocysteine & cardiovascular disease • Irregular heart beat, muscle weakness, fatigue, edema • Liver dysfunction / liver damage
<p>ANTIPSYCHOTIC DRUGS</p> <ul style="list-style-type: none"> • Mellaril, thioridazine • Navane, thiothixene • Prolixin, fluphenazine • Thorazine, chlorpromazine 	<ul style="list-style-type: none"> • Vitamin B2 • Coenzyme Q10 	<ul style="list-style-type: none"> • Problems with skin, eyes, mucous membranes and nerves • blood pressure, ↑ mitochondrial DNA damage ↓ energy, • Congestive heart failure & accelerated aging: see CoQ10 NOTES
<p>2nd GENERATION ANTIPSYCHOTICS Abilfy, aripiprazole Geodone, ziprasidone Invega, paliperidone Risperdal, risperidone Seroquel, quetiapine Zyprexa, olanzapine + others</p>	<ul style="list-style-type: none"> • MICROBIOME 	<ul style="list-style-type: none"> • See NOTES: Postbiotic Metabolites-Rapid Microbiome Restoration

<p>ANTI-VIRAL DRUGS</p> <ul style="list-style-type: none"> • Retrovir (AZT) • Zidovudine + others 	<ul style="list-style-type: none"> • Copper • Zinc • Carnitine • Vitamin B-12 	<ul style="list-style-type: none"> • Anemia, fatigue, cardiovascular & connective tissue problems • Slow wound healing, ↓ sense of smell & taste, lower immunity • Muscle weakness, cramps, fatigue • Anemia, tiredness, ↑ homocysteine & heart disease risks
<p>BRONCHODILATORS</p> <p>β2-Adrenergic Agonists</p> <ul style="list-style-type: none"> • Proair, Proventil, Ventolin, albuterol • Xopenex, levalbuterol • Servant, salmeterol • Perforomist, formoterol 	<ul style="list-style-type: none"> • Potassium 	<ul style="list-style-type: none"> • Irregular heart beat, muscle weakness, fatigue, edema
<p>Theo-Dur, theophyllin</p>	<ul style="list-style-type: none"> • Vitamin B-6 	<ul style="list-style-type: none"> • Depression, sleep problems, ↑ homocysteine & heart disease
<p>CARDIOVASCULAR DRUGS</p> <p>Beta-blockers</p> <ul style="list-style-type: none"> • Inderal, propranolol • Lopressor, metoprolol • Tenormin, atenolol, etc. 	<ul style="list-style-type: none"> • Coenzyme Q10 • Melatonin 	<ul style="list-style-type: none"> • blood pressure, ↑ mitochondrial DNA damage ↓ energy, • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES • Sleep problems, ↓ nocturnal release of melatonin (not carvedilol)
<p>Cardiac Glycosides</p> <ul style="list-style-type: none"> • Lanoxin, digoxin 	<ul style="list-style-type: none"> • Calcium • Magnesium • Thiamine 	<ul style="list-style-type: none"> • Osteoporosis, ↑ tooth decay, muscle spasms, memory loss • ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps • Nerve, GI, cardiovascular problems & depression

<p>CHEMOTHERAPY</p> <ul style="list-style-type: none"> • Many Drugs 	<ul style="list-style-type: none"> • Most nutrients are depleted • Microbiome 	<ul style="list-style-type: none"> • Too many problems to list • Heart damage due to Co Q10 depletion: See Notes <p>Destroys lining of GI tract; inflammation, inhibits nutrient absorption</p> <ul style="list-style-type: none"> • See NOTES: Postbiotic Metabolites-Rapid Microbiome Restoration
<p>CHOLESTEROL LOWERING DRUGS</p> <p>Bile Acid Sequestrants</p> <ul style="list-style-type: none"> • Questran, cholestyramine • Colestid 	<ul style="list-style-type: none"> • Vitamins A, D, E, K • Beta-Carotene • B-12, Folate • Iron 	<ul style="list-style-type: none"> • Refer to previous nutrient depletion listings for these nutrients
<p>Fibrates</p> <ul style="list-style-type: none"> • Lopid, gemfibrozil • TriCor, fenofibrate 	<ul style="list-style-type: none"> • Magnesium • Vitamin E 	<ul style="list-style-type: none"> • ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps • Neurological disorders, ↑ free radical damage, ↓ immunity
<p>HMG-CoA Reductase Inhibitors</p> <ul style="list-style-type: none"> • Crestor, rosuvastatin • Lipitor, atorvastatin • Lescol, fluvastatin • Mevacor, lovastatin • Pravachol, pravastatin • Zocor, simvastatin 	<ul style="list-style-type: none"> • Coenzyme Q10 • Magnesium 	<ul style="list-style-type: none"> • ↑ Blood pressure, ↑ mitochondrial DNA damage ↓ energy, • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES • ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps

<p>ELECTROLYTE REPLACEMENT</p> <ul style="list-style-type: none"> • Timed Release KCl • Micro-K, Slow-K 	<ul style="list-style-type: none"> • Vitamin B-12 	<ul style="list-style-type: none"> • Anemia, tiredness, ↑ homocysteine & cardiovascular disease
<p>ESTROGEN REPLACEMENT THERAPY (ERT)</p> <ul style="list-style-type: none"> • Premarin, conj. estrogens 	<ul style="list-style-type: none"> • Vitamin B6 • Magnesium • Coenzyme Q10 	<ul style="list-style-type: none"> • Depression, sleep problems, ↑ homocysteine & heart disease • ↑ Cardiovascular risks, asthma, osteoporosis, muscle cramps • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES
<p>ORAL HYPOGLYCEMICS</p> <p>Sulfonylureas</p> <ul style="list-style-type: none"> • DiaBeta, Midronase, glyburide • Amaryl, glimepiride • Glucotrol, glipizide • Tolinase, tolazamide 	<ul style="list-style-type: none"> • Coenzyme Q10 	<ul style="list-style-type: none"> • ↑ Blood pressure, ↑ mitochondrial DNA damage ↓ energy, • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES

<p>ORAL HYPOGLYCEMICS Biguanides</p> <ul style="list-style-type: none"> • Glucophage, Glumetza, metformin 	<ul style="list-style-type: none"> • Coenzyme Q10 • Vitamin B-12 • Folate 	<ul style="list-style-type: none"> • blood pressure, ↑ mitochondrial DNA damage ↓ energy, • ↑ Congestive heart failure & accelerated aging: see CoQ10 NOTES • Anemia, tiredness, ↑ homocysteine & heart disease risks • Birth defects, anemia, ↑ homocysteine & heart disease risks
<p>NARCOTIC PAIN MEDS</p> <ul style="list-style-type: none"> • Dilaudid, hydromorphone • MS Contin, Kadian, Roxanol, morphine • Methadose, methadone • Oxycontin, oxycodone 	<ul style="list-style-type: none"> • Glutathione 	<ul style="list-style-type: none"> • See Notes on <i>Lactobacillus fermentum</i> ME-3, which is the most effective way to boost glutathione levels on a daily basis.
<p>NARCOTIC PAIN MEDS WITH ACETAMINOPHEN</p> <ul style="list-style-type: none"> • Vicodin, Norco, • Percocet, Roxicet, Tylox • Tylenol w/ codeine • + others 	<ul style="list-style-type: none"> • Glutathione 	<ul style="list-style-type: none"> • See Notes on <i>Lactobacillus fermentum</i> ME-3, which is the most effective way to boost glutathione levels on a daily basis.

<p>NON-PRESCRIPTION OTC MEDS ANALGESICS <ul style="list-style-type: none"> • Aspirin, Anacin, Ascriptin, • Bufferin, Ecotrin • Fiorinal + others </p>	<ul style="list-style-type: none"> • Vitamin C • Folate • Iron • Potassium 	<ul style="list-style-type: none"> • Lowered immune system, easy bruising, poor wound healing • Birth defects, anemia, ↑ homocysteine & heart disease risks • Anemia, weakness, fatigue, hair loss, brittle nails • Irregular heart beat, muscle weakness, fatigue, edema
<p>ANALGESICS WITH ACETAMINOPHEN Actifed, Contac, Coricidin, Dayquil, Dimetapp, Dristan, Midol, Nyquil + others</p>	<ul style="list-style-type: none"> • Glutathione 	<ul style="list-style-type: none"> • See Notes on <i>Lactobacillus fermentum</i> ME-3, which is the most effective way to boost glutathione levels on a daily basis.
<p>ANTACIDS <ul style="list-style-type: none"> • Magnesium hydroxide • Aluminum hydroxide </p>	<ul style="list-style-type: none"> • Calcium • Phosphate • Folate 	<ul style="list-style-type: none"> • Osteoporosis, ↑ tooth decay, muscle spasms, memory loss • Weakness, trouble breathing, and loss of appetite. • Birth defects, anemia, ↑ homocysteine & heart disease risks

<p>LAXATIVES Mineral Oil</p>	<p>Beta-carotene, calcium, phosphorus, Vitamin A, D, E, K</p>	<ul style="list-style-type: none"> • See previous listings
<p>Bisacodyl</p>	<ul style="list-style-type: none"> • Potassium • Sodium 	<ul style="list-style-type: none"> • Irregular heart beat, muscle weakness, fatigue, edema • Muscle weakness, dehydration, poor concentration, ↓ appetite
<p>OTC NSAIDs (many, see previous section)</p>	<ul style="list-style-type: none"> • Folate • Melatonin • Microbiome 	<ul style="list-style-type: none"> • Birth defects, anemia, ↑ homocysteine & heart disease risks • Sleep problems • See NOTES: Postbiotic Metabolites-Rapid Microbiome Restoration



NOTES: Quick Reference Guide to Drug-Induced Nutrient Depletions.

I want to introduce you to several products that provide unique and unprecedented health benefits along with some general comments about the Quick Reference Guide to Drug-Induced Nutrient Depletions.

This is not a complete reference guide. It only lists nutrient depletions for the most commonly prescribed medications. Many newer drugs are not listed because nutrient depletion studies have not yet been conducted. Drug classes are listed in alphabetical order. However, I put oral contraceptives first to emphasize this important women's health issue and the fact that oral contraceptives deplete more nutrients than any other class of drugs.

Postbiotic Metabolites/Rapid Microbiome Restoration: Research emanating from the Human Microbiome project is continuing to explain how compounds produced by probiotic bacteria, collectively referred to as postbiotic metabolites, are critical master health-regulating compounds in the human body. Directly ingesting postbiotic metabolites is a much faster method of eliciting improvements in the microbiome ecosystem compared to just ingesting probiotic bacteria. Products that contain a combination of probiotics and postbiotic metabolites are becoming more popular as the health-regulating effects of postbiotic metabolites becomes better understood. Postbiotic metabolites derived from "long-term" fermentation may be the most effective way to create and maintain a healthy microbiome. I wrote an article titled ***Postbiotic Metabolites: The New Frontier In Microbiome Science*** which provides an in-depth explanation of the benefits of postbiotic metabolites and information about Dr. Ohhira's Probiotics®, which contains live probiotic bacteria plus over 500 postbiotic metabolites. Dr. Ohhira's Probiotics is the #1 product in the world for direct delivery of postbiotic metabolites. Send request for my article to: ross@naturalpharmacist.net

Boosting Glutathione Levels: *Lactobacillus fermentum* ME-3 is a strain of probiotic bacteria that synthesizes glutathione. Individuals ingesting *Lactobacillus fermentum* ME-3 for 3 weeks gained a 49% increase the ratio of reduced to oxidized glutathione, a 16% reduction in oxidized LDL-cholesterol and a 26% increase in total antioxidant activity. Products containing *Lactobacillus fermentum* ME-3 are the most reliable & cost effective method of boosting glutathione levels. If you would like a copy of my article titled ***Lactobacillus fermentum* ME-3: A New Era in Glutathione Therapy**, send an email request to: ross@naturalpharmacist.net



Coenzyme Q10: Most CoQ10 products have very low rates of absorption (only 1-2%) because the melting point of CoQ10 is 10 degrees higher than body temperature, which causes the CoQ10 to crystalize. Pharma Nord of Denmark has a proprietary process that keeps CoQ10 in solution, resulting in greater absorption. There is also controversy regarding ubiquinone vs ubiquinol. Some claim ubiquinol is better absorbed. Absorption studies prove this to be false. When ubiquinol is ingested, it is quickly oxidized and converted to ubiquinone. Ubiquinol is more expensive and does not provide higher blood levels.

Pharma Nord's Bio-Quinone CoQ10 has been utilized in most of the large CoQ10 clinical trials conducted over the past 25 years. A recent study evaluated the absorption of 6 top CoQ10 products. Pharma Nord's Bio-Quinone was found to have from 3 to 10 times better absorption than the other five CoQ10 products. I recommend watching the following 2-minute video:

<https://www.pharmanord.com/coq10-absorption>

Healthcare practitioners: Open a Professional Account with Pharma Nord and get wholesale pricing by sending a request to Pharma Nord at: practitioner@pharmanord.com

Individuals can order Bio-Quinone at <https://www.pharmanord.com/>

When checking out, utilize promotional code NPQ10 for a 20% discount.

FULL DISCLOSURE: I am the Scientific Director at Essential Formulas. Dr. Ohhira's Probiotics and Reg'Activ products are products marketed by Essential Formulas.

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