

# Correcting Pharmaceutical-Induced Nutritional Deficiencies

Whilst pharmaceuticals have life-saving benefits, they often come with serious side effects, ranging from cardiac arrest to suicide.

Pharmaceutical induced side effects are often ignored and can cause grave health problems. These pharmaceuticals often deplete nutrients or other helpful substances, and this lack of nutrients causes additional side effects. In a sense, these medicines act as an antivitamin pill, taking away the substances you need for good health.

Among the most common medicines linked to nutrient depletion are oral contraceptives, cholesterol-lowering statins and antibiotics. These and many other over-the-counter and prescription medications can interfere with your body's ability to digest, absorb, synthesise or make use of certain nutrients, leading to nutrient deficiency-related side effects.

The solution to averting pharmaceutical-induced nutritional deficiencies is to replace the depleted nutrients through nutritional supplements, dietary sources or both. This chart summarises some commonly prescribed medicines, along with the vitamins, minerals and other nutraceuticals they are most likely to deplete, as well as which SOLAL products should be used at the same time as pharmaceutical medicines to prevent these depletions.

## Why use SOLAL products to correct nutrient depletions?

### Treatment corrective dosages, not RDA amounts:

- SOLAL supplies scientifically researched treatment dosages of vitamins, minerals, nutraceuticals and not only the minimum RDA (recommended daily allowance) doses. RDA doses are often not enough to replace deficiencies caused by poor dietary intake and medicines that flush nutrients from the body.
- SOLAL does not compromise on doses of expensive ingredients, such as co-enzyme Q<sub>10</sub>, but always provides the scientifically proved effective dose.

### Safest forms:

- At low doses, the form of a vitamin or mineral is not that important. However, at higher doses, the form is important, because as an example, the cyanocobalamin form of vitamin B<sub>12</sub> is metabolised to cobalamin and cyanide. At higher doses the build up of cyanide can block metabolic pathways and become toxic. For this reason, SOLAL uses the more expensive but safer methylcobalamin form of vitamin B<sub>12</sub>, which has added liver benefits.
- Other examples include using chelated amino acid forms of minerals, which are not only more effective, but do not cause the safety risks (such as slightly elevated cancer risks) associated with inorganic mineral salt forms of minerals.



Pharmaceutical medicine	Deficiency caused	SOLAL product to correct deficiency
<b>ACE inhibitors</b> (eg. Benazepril, Captopril, Enalapril, Lisinopril, Perindopril, Quinopril, Ramipril)	Zinc	<b>Multi Mineral or ACES Plus™</b>
<b>Alendronate</b> (including all bisphosphonates)	Calcium	<b>Calcium Glycinate with vitamin D<sub>3</sub></b>
<b>Antacids</b> (Aluminium salts)	Copper & zinc Magnesium & calcium Iron	<b>Multi Mineral Bio-Calmag™ Iron Plus Formula</b> (take Iron Plus and Bio-CalMag™ 3 or more hours apart)
<b>Antacids</b> (Calcium salts)	Copper & zinc Magnesium Iron	<b>Multi Mineral Magnesium Glycinate Iron Plus Formula</b> (take Iron Plus and Calcium antacids 3 or more hours apart)
<b>Antacids</b> (Magnesium salts)	Copper & zinc Calcium Iron	<b>Multi Mineral Calcium Glycinate Iron Plus Formula</b> (take Iron Plus and Calcium antacids 3 or more hours apart)
<b>Antibiotics: AMINOGLYCOSIDES</b> (eg. Gentamicin, Neomycin, Tobramycin)	Calcium & magnesium Vitamin K Lactobacillus (Probiotics)	<b>Bio-CalMag™ Vitamin K<sub>2</sub> Probiotic -Maximum Potency</b>
<b>Antibiotics: CEPHALOSPORINS</b> (eg. Cefaclor, Cefprozil, Cefuroxime, Loracarbef) - also <b>MACROLIDES</b> (Erythromycin, Azithromycin, Clarithromycin) - also <b>PENICILLINS</b> (eg. Amoxicillin, Ampicillin, Flucloxacillin, Pivampicillin) - also <b>QUINOLONES</b> (eg. Ciprofloxacin, Levofloxacin, Lomefloxacin, Moxifloxacin, Nalidixic acid, Norfloxacin, Ofloxacin, Gemifloxacin) - also <b>SULFA ANTIBIOTICS</b> (eg. Co-trimoxazole, Sulfamethoxazole, Trimethoprim)	Vitamin A & B <sub>12</sub> Lactobacillus (Probiotics) Vitamin B <sub>12</sub> , B <sub>12</sub> , folic acid, biotin Vitamin K	<b>3-Per-Day™ Probiotic -Maximum Potency Super Mega-B™ Vitamin K<sub>2</sub></b>
<b>Antibiotic: ISONIAZID</b> (anti-TB medication)	Calcium & vitamin D Lactobacillus (Probiotics) Vitamin B <sub>12</sub> , B <sub>12</sub> , Vitamin E	<b>Calcium Glycinate with vitamin D<sub>3</sub> Probiotic -Maximum Potency 3-Per-Day™</b>
<b>Anti-inflammatory: NSAIDs</b> (eg. diclofenac, fenoprofen, ibuprofen, indomethacin, ketoprofen, mefenamic acid, naproxen, piroxicam, sulindac)	Iron & folic acid Zinc Melatonin	<b>Iron Plus Formula Multi Mineral Melatonin or Melatonin Slow Release</b>
<b>Anti-retrovirals: REVERSE TRANSCRIPTASE INHIBITORS</b> (eg. Lamivudine (3TC), Didanosine (ddI), Zalcitabine (ddC), Stavudine (d4T), Ribavirin, Zidovudine (AZT), Abacavir (ABC), Emtricitabine (FTC), Tenofovir, Adefovir, Efavirenz, Nevirapine, Delavirdine)	Copper & zinc	<b>Multi Mineral</b>
<b>Aspirin</b>	Iron, folic acid & vitamin C	<b>Iron Plus Formula</b>
<b>Barbiturates</b> (eg. Phenobarbital)	Calcium & vitamin D Folic acid & vitamin B <sub>12</sub>	<b>Calcium Glycinate with vitamin D<sub>3</sub> Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™</b>
<b>Betablockers</b> (eg. Acebutolol, Atenolol, Bisoprolol, Metoprolol, Nadolol, Propranolol, Sotalol, Timolol)	Melatonin	<b>Melatonin or Melatonin Slow Release</b>
<b>Birth control pill</b> (estrogen/progestin combination) -mono/bi & triphasic (eg. Ethinyl estradiol, Desogestrel, Levonorgestrel, Norethindrone, Norgestimate)	Magnesium Zinc Vitamin B <sub>12</sub> , B <sub>6</sub> , B <sub>12</sub> , C & folic acid	<b>Magnesium Glycinate Multi Mineral or ACES Plus™ 3-Per-Day™</b>
<b>Carbamazepine</b>	Folic acid	<b>Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™ or Folic Acid or Folic Acid (Natural Folate Form)</b>
<b>Cholestyramine &amp; Colestipol</b> (bile sequestrants)	Vitamin A, D, E, B <sub>12</sub> & folic acid & beta-carotene Vitamin K	<b>ACES Plus™ with Super Mega-B™ and Vitamin D<sub>3</sub> Vitamin K, Plus</b>
<b>Clonidine</b>	Co-enzyme Q <sub>10</sub>	<b>Ubiquinol Co-Q<sub>10</sub> or Co-Enzyme Q<sub>10</sub></b>
<b>Corticosteroids</b> (eg. prednisone, prednisolone, hydrocortisone, beclomethasone, dexamethasone, triamcinolone)	Calcium & magnesium Protein Selenium & zinc Melatonin	<b>Bio-CalMag™ Pure Whey Protein concentrate or Super Nutrient Health Shake ACES Plus™ Melatonin or Melatonin Slow Release</b>
<b>Digoxin</b>	Magnesium Vitamin B <sub>1</sub>	<b>Magnesium Glycinate Super Mega-B™ or 3-Per-Day™ or Benfotiamine (B<sub>1</sub>)</b>
<b>Diuretics [Loop]</b> (eg. Bumetanide, Furosemide, Torsemide)	Calcium & Magnesium ( <b>however, if this type of diuretic is COMBINED with a potassium sparing diuretic, then a magnesium deficiency will NOT occur. A calcium deficiency IS still likely though.</b> ) Potassium ( <b>however, if this type of diuretic is COMBINED with a potassium sparing diuretic, then a potassium deficiency will NOT occur.</b> ) Vitamin B <sub>1</sub> , B <sub>6</sub> & C	<b>Bio-CalMag™ [Calcium &amp; Magnesium]</b> ( <b>however, if this type of diuretic is combined with a potassium sparing diuretic, then DO NOT supplement with Magnesium: Rather use Calcium Glycinate instead of Bio-CalMag™.</b> ) [SOLAL does not have a potassium supplement – use Plenish-K®/Slow-K]. <b>However, if this type of diuretic is combined with a potassium sparing diuretic, then DO NOT supplement with Potassium.</b> <b>3-Per-Day™</b>
<b>Diuretics [Potassium sparing]</b> (eg. Amiloride, Triamterene, Spironolactone)	Calcium Folic acid	<b>Calcium Glycinate with vitamin D<sub>3</sub> Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™ or Folic Acid or Folic Acid (Natural Folate Form)</b>
<b>Diuretics [Thiazide type]</b> (eg. Chlorothiazide, Hydrochlorothiazide, Indapamide)	Co-enzyme Q <sub>10</sub> Potassium ( <b>however, if this type of diuretic is COMBINED with a potassium sparing diuretic, or an ACE inhibitor, then a potassium deficiency will NOT occur.</b> ) Magnesium ( <b>however, if this type of diuretic is COMBINED with a potassium sparing diuretic, then a magnesium deficiency will NOT occur.</b> ) Zinc ( <b>however, if this type of diuretic is COMBINED with a potassium sparing diuretic, then a zinc deficiency will NOT occur.</b> )	<b>Ubiquinol Co-Q<sub>10</sub> or Co-enzyme Q<sub>10</sub></b> [SOLAL does not have a potassium supplement – use Plenish-K or Slow-K]. <b>However, if this type of diuretic is combined with a potassium sparing diuretic, or an ACE inhibitor, then DO NOT supplement with potassium.</b> <b>Magnesium Glycinate</b> ( <b>however, if this type of diuretic is combined with a potassium sparing diuretic, then DO NOT supplement with magnesium supplements.</b> ) <b>Multi Mineral or ACES Plus™</b> ( <b>however, if this type of diuretic is combined with a potassium sparing diuretic, then DO NOT supplement with zinc containing supplements.</b> )
<b>Fibrate type cholesterol reducing medications</b> (eg. Bezafibrate, Ciprofibrate, Clofibrate, Gemfibrozil, Fenofibrate)	Co-enzyme Q <sub>10</sub> Vitamin E	<b>Ubiquinol Co-Q<sub>10</sub> or Co-enzyme Q<sub>10</sub> Full Spectrum Vitamin E or 3-Per-Day™</b>
<b>Histamine H2 blockers</b> (eg. Cimetidine, Ranitidine, Famotidine, Nizatidine)	Calcium & Vitamin D Iron, Vitamin B <sub>12</sub> & Folic acid Zinc	<b>Calcium Glycinate with vitamin D<sub>3</sub> Iron Plus Formula Multi Mineral</b>
<b>Hydralazine</b>	Co-enzyme Q <sub>10</sub> Magnesium Vitamin B <sub>6</sub>	<b>Ubiquinol Co-Q<sub>10</sub> or Co-enzyme Q<sub>10</sub> Magnesium Glycinate Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™</b>
<b>Metformin</b>	Folic acid & vitamin B <sub>12</sub>	<b>Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™ or Folic Acid or Folic Acid (Natural Folate Form)</b>
<b>Paracetamol</b>	Glutathione Selenium	<b>N-Acetyl-Cysteine ACES Plus™</b>
<b>Phenytoin</b>	Calcium & vitamin D Vitamin B <sub>1</sub> , folic acid & biotin	<b>Calcium Glycinate with vitamin D<sub>3</sub> Super Mega-B™</b>
<b>Proton pump inhibitors</b> (eg. Lansoprazole, Omeprazole)	Vitamin B <sub>12</sub>	<b>Methylcobalamin (Vitamin B<sub>12</sub>)</b>
<b>Psychotropics: PHENOTHIAZINES</b> (eg. Chlorpromazine, Fluphenazine, Prochlorperazine, Trifluoperazine)	Co-enzyme Q <sub>10</sub> Vitamin B <sub>2</sub>	<b>Ubiquinol Co-Q<sub>10</sub> or Co-enzyme Q<sub>10</sub> Super Mega-B™</b>
<b>Sodium bicarbonate</b>	Magnesium Folic acid	<b>Magnesium Glycinate Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™ or Folic Acid or Folic Acid (Natural Folate Form)</b>
<b>Sulfasalazine</b>	Folic acid	<b>Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™ or Folic Acid or Folic Acid (Natural Folate Form)</b>
<b>SSRI antidepressants</b> (eg. Fluoxetine, Sertraline, Paroxetine, Citalopram, Escitalopram, Fluvoxamine)	Melatonin Protein	<b>Melatonin or Melatonin Slow Release Pure Whey Protein or Super Nutrient Health Shake</b>
<b>Statins (HMG-CoA reductase inhibitors)</b> (eg. Atorvastatin, Fluvastatin, Lovastatin, Pravastatin, Simvastatin, Rosuvastatin)	Co-enzyme Q <sub>10</sub>	<b>Ubiquinol Co-Q<sub>10</sub> or Co-enzyme Q<sub>10</sub></b>
<b>Sulfonylureas antidiabetic medication</b> (eg. Acetohexamide, Chlorpropamide, Glizclazide, Glipizide, Glybenclamide, Tolbutamide)	Co-enzyme Q <sub>10</sub>	<b>Ubiquinol Co-Q<sub>10</sub> or Co-enzyme Q<sub>10</sub></b>
<b>Theophylline &amp; derivatives</b> (eg. Theophylline, Aminophylline)	Vitamin B <sub>6</sub>	<b>Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™</b>
<b>Tricyclic antidepressants</b> (eg. Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin, Imipramine, Nortriptyline, Protriptyline, Trimipramine)	Co-enzyme Q <sub>10</sub> Vitamin B <sub>2</sub>	<b>Ubiquinol Co-Q<sub>10</sub> or Co-enzyme Q<sub>10</sub> Super Mega-B™ or 3-Per-Day™</b>
<b>Valproic acid &amp; derivatives</b>	L-Carnitine Copper, zinc & selenium Folic acid	<b>L-Carnitine or Acetyl-L-Carnitine or Acetyl-L-Carnitine &amp; L-Carnitine- Optimal Forms™ Multi Mineral Homocysteine Lowering Formula or Super Mega-B™ or 3-Per-Day™ or Folic Acid or Folic Acid (Natural Folate Form)</b>

Manufactured in a GMP (Good Manufacturing Practice) licensed facility, ensuring pure, safe and uncontaminated products of the highest quality. All our raw materials are tested for purity. Our products do not contain any unhealthy or bulky fillers, but rather are filled to the brim with therapeutic doses of active nutrients and plant extracts.

**SOLAL™**  
TECHNOLOGIES  
ANTI-AGING SPECIALISTS™  
PRESCRIBED BY DOCTORS  
RECOMMENDED BY PHARMACISTS™

Tel: 011 783 3939

Email: [solal@solaltech.com](mailto:solal@solaltech.com)

Order online from the comfort of your home or office at [www.solaltech.com](http://www.solaltech.com)