

DRUG→NUTRIENT DEPLETION

Which micronutrients are depleted by which medications (or health condition)? The drug insert may indicate; pharmacists can assist; and do your research! Note that drug(s) may not cause an actual *clinical* deficiency, such that supplementing with a Therapeutic Dose (TD) of the micronutrient(s) it depletes may not be warranted. Simply be conscious and replenish the micronutrient(s) with foods, a general multi-vitamin/mineral supplement, and /or stay within the RDA, DRI, EAR, AI, and under the TD & UL (see below) if self-supplementing individual micronutrient(s). *Visit www.WHF.com for food sources of the micronutrient(s) before supplementing!*

Drug	Nutrient Depletion
Antacid: Maalox, Mylanta	Calcium, Phosphate, Thiamine [B9]
Antibiotic: Bactrim, Septra (sulfa drugs)	K. [B2, PABA, B5]
Antibiotic: Cipro	Calcium, Iron, Zinc
Antibiotic: Macrochantin	Folic Acid
Antibiotic: Tetracycline	Calcium, Iron, Magnesium, Zinc, Riboflavin, C
Antibiotics: Fluroquinolones	Calcium
Aspirin	Folic Acid, C, Iron. [Choline]
Birth Control Pills	Folic Acid, B6, E, C
BP med: ACE inhibitors	Potassium
BP med: Apresoline (hydrazaline drugs)	B6
BP med: Hydrochlorothiazide	Magnesium, Potassium, Zinc [Calcium]
Cholesterol med: Statins & Bile Acid Sequestrants	BAS interfere with the absorption of fats & fat-soluble vitamins → mental fogginess. Statins deplete CoQ10 and should <i>always</i> be taken with a 200 - 400mg CoQ10 supplement!
Coumadin	C, E, K
Dilantin	Folic Acid, Calcium, B6, D, K. [B1, B9]
Diuretic: Lasix	Calcium, Magnesium, Potassium
Female Hormone Replacement (HRT)	Folic Acid, Vitamins B6, E, C. [B3, Choline, Zinc, B1, B2, B5, Mg]
Laxative: Mineral oil	A, D, E, K
Levodopa	B6
Potassium (K-Tab, Micro-K, Slow-K)	B12
GERD & Ulcer meds: Tagamet, Zantac, Prilosec	B12 & Intrinsic Factor. Reducing acid as effectively as these medications do allows bacteria to survive the stomach to produce a carcinogen called nitrosamines that may increase the risk of stomach cancer. Vitamins C & E are suggested to offset the risk.
Graedon People's Pharmacy NC, "Graedon's Guide to Drug & Nutrient Interactions"	

Age & Aging	Over 40 → D, B6. Over 50 → B12. Menopausal →E, Calcium
Digoxin	Calcium, B1
Environmental	Air Pollution →C, E, Selenium, Mg. Lead →D, B1 Fluorescent Lights → A
Glyburide	CoQ10
Habits / Addictions	Smoking → B1, B9, B12, C, A, Mg. Caffeine → B1, Iron. Alcohol → D, B1, B2, B3, B5, B6, B9, Choline, Mg. Food Additives → D
Long-term Hospitalization	D, C
Radiation & Chemotherapy	Radiation → K. Chemotherapy → E, B9, Mg. Methotrexate → B9
Steroids	Calcium, B5
Stress	A, C, E, Zinc, B-complex etc etc...see " Take Care of Stress " at www.bookemon.com/flipread/722740/take-care-of-stress
TB meds	E, B3, B6
Tylenol, IBP	B9

Supplementation Goals

(Vitamin A will be used as an example)

Recommended Dietary Allowance (RDA) is the minimum requirement to avoid a deficiency. It is not the amounts needed to replete a nutrient deficiency nor decreases the risk of developing a nutrient deficiency disease. The RDA is a goal for general dietary intake, not for assessing or planning. *The RDA of vitamin A for the adult female is 700 micrograms (mcg).*

Dietary Reference Intake (DRI) is the average daily dietary nutrient intake sufficient to meet the nutrient requirement of 97 to 98% of healthy individuals in a particular life stage and gender group. DRI is a group of references that expand on the RDA with 3 categories that can be looked at when determining nutritional needs:

1. **Estimated Average Requirements (EAR)** is the average/estimate daily nutrient required by 50% of healthy individuals in a particular life stage and gender group. This estimate accurately represents a particular food's contribution to the total nutrient needs of the general population. This EAR is for those 4 years of age and older, excluding pregnant & lactating women. *There is no EAR for vitamin A.*
2. **Adequate Intake Levels (AI)** is the recommended average daily intake level that is assumed adequate based on observation or experiment. It is used when an RDA cannot be determined or if there is insufficient scientific evidence to calculate an EAR. It will **usually exceed the EAR and possibly the RDA.** *The AI for vitamin A indicated for babies 0-6 mos old is 400 mcg; and 7-12 mos is 500 mcg.*
3. **Tolerable Upper Intake Levels (UL)** is the highest average daily nutrient intake that is likely to pose no risk to health. The potential risk of adverse effects may increase as the nutrient intake increases beyond the UL. In other words, it is the maximum level that is unlikely to cause adverse health effects in almost all individuals in a target group. *The vitamin A UL for the adult female is 3000 mcg.*

Therapeutic Dose (TD) is the dosage PRESCRIBED by a healthcare professional to correct a CLINICAL or severe deficiency. *Vitamin A supplement can be toxic. The TD therefore indicates using beta-carotene, a water-soluble & nontoxic source of vitamin A instead (even beta-carotene has precautions). The TD is up to 50,000 IU of beta-carotene daily for no more than 1 month, then reduce to 25,000 IU. Pregnant women should not take more than 15,000 IU of beta-carotene daily, because the higher doses are associated with birth defect. This is in comparison to a UL dose of vitamin A which should not exceed 25,000 IU (adults)/10,000 IU (children) daily.*

Be Well! Dr. Lori

Call me with any Questions & Concerns about your product(s) 806-268-4897