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Encyclopedia of Nutritional Supplements

*The Essential Guide for Improving
Your Health Naturally*

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Some Practical Recommendations

Since this book is filled with such exciting information about specific nutrients, I must make some practical recommendations. Otherwise, I can imagine a reader going into a health food store and coming out with single bottles of every nutrient described in this book. To simplify matters, I tend to recommend the following supplements to establish a strong nutritional foundation upon which to build:

- Take a high-quality multiple vitamin and mineral supplement.
- Take extra antioxidants.
- Take one tablespoon of flaxseed oil daily.

Recommendation 1—Take a High-Quality Multiple Vitamin and Mineral Supplement

Taking a high-quality multiple vitamin and mineral supplement that provides all of the known vitamins and minerals serves as the foundation of a nutritional supplementation program. Dr. Roger Williams, one of the premier biochemists of our time, states that healthy people should use multiple vitamin and mineral supplements as an “insurance formula” against possible deficiency. This does not mean that a deficiency will occur in the absence of the vitamin and mineral supplement any more than not having fire insurance means that your house is not going to burn down. But given the enormous potential for individual differences and the varied mechanisms of vitamin and mineral actions, supplementation with a multiple formula seems to make sense. The recommendations in the table on the next page provide an optimum intake range for selecting a high-quality multiple supplement.

Recommendation 2—Take Extra Antioxidants

Most health-minded individuals are familiar with the terms *antioxidants* and *free radicals*. Loosely defined, a free radical is a highly reactive molecule that can bind to and destroy body components. Free radical or “oxidative” damage is what makes us age.

Recommended Vitamin Intake in International Units (I.U.), Milligrams (mg.), or Micrograms (mcg.)

<i>Vitamin</i>	<i>Range for Adults</i>	<i>Comments</i>
Vitamin A (retinol)	5,000 I.U.	Women of child-bearing age should not take more than 2,500 I.U. of retinol daily due to the possible risk of birth defects if they become pregnant.
Vitamin A (from beta-carotene)	5,000–25,000 I.U.	
Vitamin D	100–400 I.U.	Elderly people in nursing homes living in northern latitudes should supplement at the high range.
Vitamin E (d-alpha tocopherol)	100–800 I.U.	It may be more cost effective to take vitamin E separately.
Vitamin K (phytonadione)	60–300 mcg.	
Vitamin C (ascorbic acid)	100–1,000 mg.	It may be easier to take vitamin C separately rather than in a multiple formula.
Vitamin B ₁ (thiamin)	10–100 mg.	
Vitamin B ₂ (riboflavin)	10–50 mg.	
Niacin	10–100 mg.	
Niacinamide	10–30 mg.	
Vitamin B ₆ (pyridoxine)	25–100 mg.	
Biotin	100–300 mcg.	
Pantothenic acid	25–100 mg.	
Folic acid	400 mcg.	
Vitamin B ₁₂	400 mcg.	
Choline	10–100 mg.	
Inositol	10–100 mg.	

Free radicals have also been shown to be responsible for the initiation of many diseases, including the two biggest killers of Americans—heart disease and cancer.

Antioxidants, in contrast, are compounds that help protect against free-radical damage. Antioxidant nutrients like beta-carotene, selenium, vitamin E, and vitamin C are very important in protecting against the development of heart disease, cancer, and other chronic degenerative diseases. In addition, antioxidants are also thought to slow down the aging process.

Based on extensive data, it appears that a combination of antioxidants will provide greater antioxidant protection than any single nutritional antioxidant. Therefore, in addition to recommending that individuals consume a diet rich in plant foods, especially fruits and vegetables, I suggest using a combination of antioxidant nutrients rather than high dosages of any single antioxidant. Mixtures of antioxidant nutrients

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Folic Acid

Folic acid, also known as folate, folacin, and pteroylmonoglutamate, functions together with vitamin B₁₂ in many body processes. It is critical to cellular division because it is necessary in DNA synthesis. Without folic acid, cells do not divide properly. Folic acid is critical to the development of the nervous system of the fetus. Deficiency of folic acid during pregnancy has been linked to several birth defects, including neural tube defects like spina bifida. Folic acid deficiency is also linked to depression, atherosclerosis, and osteoporosis.

Food Sources

Folic acid received its name from the Latin word *folium*, which means "foliage," because it is found in high concentrations in green leafy vegetables like kale, spinach, beet greens, and chard. Other good sources of folic acid include legumes, asparagus, broccoli, cabbage, oranges, root vegetables, and whole grains (see Table 14.1)

TABLE 14.1 Folic Acid Content of Selected Foods, in Micrograms per 3¹/₂-oz. (100-g.) Serving

Yeast, brewer's	2,022	Lentils	105	Whole-wheat flour	38
Blackeye peas	440	Walnuts	77	Oatmeal	33
Rice germ	430	Spinach, fresh	75	Cabbage	32
Soy flour	425	Kale	70	Dried figs	32
Wheat germ	305	Filbert nuts	65	Avocado	30
Liver, beef	295	Beet & mustard greens	60	Green beans	28
Soy beans	225	Peanuts, roasted	56	Corn	28
Wheat bran	195	Peanut butter	56	Coconut, fresh	28
Kidney beans	180	Broccoli	53	Pecans	27
Mung beans	145	Barley	50	Mushrooms	25
Lima beans	130	Split peas	50	Dates	25
Navy beans	125	Whole-wheat cereal	49	Blackberries	14
Garbanzos	125	Brussels sprouts	49	Orange	5
Asparagus	110	Almonds	45		

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