SOME KEY BONE BUILDING NUTRIENTS

These are in alphabetical order--not priority. All are needed, but lack of those in bold is very often a big problem.

Nutrient	Typical Recommendation	Better	Real World Intake / Notes
Boron	No RDA established	3-4 mcg	1/4 mg intake is common (Nielsen, et al., 1987) to perhaps optimum of 3 mgs
Calcium	800-1200 mg	Okay for most	400-550 mg. Typical diet is inadequate (Kavioli, 1988;NIH Census, 1984; Morgan, 1985).
Copper	2.0-3.0 mg adults	2 to 4 mg	75% of diets fail to contain the RDA (Klevay, 1979; Pennington, et al 1986).
Magnesium	350 mg adult males, 300 mg adult females (the female RDA was lowered to 280 mg in 1989	450-800 mg	Intake generally inadequate: All ages, sexes, classes, except children less than 5, fail to consume this RDA. 40% of population, 50% of adolescents consume less than 2/3 the RDA. (Morgan, et a!, 1985; Lakshmanan, et al, 1984;USDA, 1977; Pennington1986;
Phosphorus	800-1,200 mg	800-1,200 mg	Inadequate intake is rare, excessive intake common.
Manganese	2.0-5.0 mg adults	10 to 40 mg	Intakes generally inadequate, 1.76mg adolescent girls 2.05 mg women, 2.5 males (Freeland-Graves, 1988).
Protein	63 grams adult males, 50 grams adult females	probably okay	Often approaches 100 grams. Vegetarians may be deficient.
Silica	No values yet set	5-20 mg	Intake is unknown. Silica is the first to go in food processing, current intake is suspected to be low (Kaufmann, 1990).
Stomach Acid	Must be tested by doctor	Crucial	Lowered by age, acid blockers and other drugs.
Vitamin A	5000 IU adult males 4000 IU adult females	5,000 IU males 4,000 IU females	31% consume less than 70% of RDA (Pao & Mickle, 1981). Excess hard on bones likely because interferes with D.
Vitamin B6	2.2 mg adult males, 2.0 mgs adult females (lowered in 1989 to 2.0 and 1.6 mg)	50-100 mg	Over one half consume less than 70% of RDA (USDA, 1977).
Vitamin B12	3.0 mg adults (lowered to 2.0 mg in 1989, RDA)	100 to 1000 mcg	12% consume less than 70% RDA (Pao & Mickle, 1981) Sublingual best.
Vitamin C	60 mg adults	3,000 mg	26% of the population consumes less 70% of RDA (USDA, 1977).
Vitamin D	200 IU adults, 400 IU in growth	2,000 IU	Deficiency is common among the elderly. Testing is now more common.
Vitamin K	70-140 mcg for adult	1000 mcg and up	60 to 80 mcg
Zinc	12-15 mg adults	20 to 40 mg	Average intake is 46 to 63% the RDA (Maleskey, 1985; Pennington, 1986).

Chart adapted and modified by Whittekin 2008 from information on www.betterbones.com -- The Osteoporosis Education Project