

Can eating more salads help prevent hip fractures?

Osteoporosis is an important and, frankly, frightening epidemic amongst older adults in America. At least ten million Americans today have low bone mass and strength associated with increased risk of fractures (the definition of osteoporosis) and up to 35 million more have osteopenia, the earliest “thinning” of the bones that can eventually lead to osteoporosis. The consequences can be devastating: fractures (often of the hip or spine, but can occur in any bone in the body) that can cause severe pain, irreversible disability and, in up to 20% of all those who experience hip fractures, even death as a consequence of complications of osteoporosis. Worst of all, osteoporosis is often a “silent” disease, one in which no symptoms may exist until the first fracture occurs.

For many years we have been encouraging men and women alike to increase their calcium and Vitamin D intake, become more physically active, and consider screening with bone density testing in order to help prevent and diagnose osteoporosis. But when have you ever heard your doctor recommend eating more green, leafy vegetables in order to strengthen your bones?

One of the recent areas of hot research in osteoporosis has to do with the connection between Vitamin K (the vitamin associated with clotting of the blood and found primarily in green leafy vegetables) and weakening of the bones. Although the exact chemical interaction between Vitamin K and bone health is very complicated, suffice it to say that an adequate intake of Vitamin K is quickly being recognized to be as important as taking proper levels of Vitamin D. Unfortunately, less than optimal levels of vitamin K in healthy individuals across many age ranges may be very common, and the use of the common anti-coagulant Coumadin (Warfarin®TM) causes a state of functional Vitamin K deficiency that has been long recognized as a risk factor for osteoporosis.

So what are the current recommendations for prevention and treatment of osteoporosis? Well, though there have not been any official recommendations yet presented regarding the use of Vitamin K in prevention of osteoporosis, the incorporation of green leafy vegetables (such as spinach, kale and broccoli sprouts) as well as not-so-green-leafy foods (such as cauliflower, chick peas, green tea and beef or pork livers) into one’s diet seems a prudent move toward better bone health. Continuing to be aware of appropriate intake of Calcium (at least 1000 mg/day) and Vitamin D (at least 200-400 IU/day) as well as continuing good, weight-bearing exercise remain the mainstay of recommendations. And don’t forget proper screening of older adults for bone density (if you do not know if you are at risk PLEASE ask your doctor!)