Do YOU Have Osteoporosis? Have YOU been tested? By Stephen Weiss, M.D., ???

9 years ago, a couple of months shy of my 40th birthday, I accepted a job as staff physician at the Schachter Center for Complementary Medicine in Suffern, New York. During my orientation, Romelo, the Filipino Lab Director, took me on a tour of the lab and spoke to me about the various tests offered at the Center. We stopped in front of the DXA (bone density) machine, and after extolling its virtues, he encouraged me to get tested so I could experience the screening device first-hand.

My eyes (and his) nearly popped out of their sockets two minutes later when the results came back. They showed that the bone density of my finger was 3.1 standard deviations below the mean of a young healthy woman, well into the osteoporosis range. You read that correctly—in 1999 there were no norms for men, in part because bone loss was erroneously thought to spare us. It was one of the worst readings Romelo had ever seen. I was dumbfounded. Surely the test was inaccurate. I had played on two different competitive soccer teams while growing up in Switzerland, was not post-menopausal, and was 39 years old. I ate more cheese during my eleven years in Geneva than most people eat in a lifetime. How could this be?

My PCP referred me for a DXA scan of my hip and spine, and low and behold, I had osteoporosis. Extensive testing by a nationally-renowned osteoporosis specialist did not reveal a definitive cause, although genetics was presumed to be the culprit since both of my parents and my 44 year old sister were afflicted. In the past 9 years, using only natural therapies, my bone density has steadily improved. I no longer have osteoporosis; results now show osteopenia, a less severe form of bone loss.

Osteoporosis statistics are rather sobering. Did you know that 10 million Americans suffer from osteoporosis, while another 34 million have osteopenia? That half of all women over 50 will have an osteoporotic fracture during their lifetime, as well as 25% of men? Are you aware that 31% of men who develop hip fractures die from them, or that 47% of post-menopausal women have undiagnosed bone loss?

Although, as my own history attests, bone loss can strike anyone, there are numerous factors which increase an individual's risk. These include age, female sex, family history, low body weight, race (Caucasians, Asians and Hispanics are more susceptible than Blacks), low sex hormones (early menopause, skipped periods, post-menopausal status, low estrogen, DHEA, testosterone and possibly progesterone levels) low Vitamin D levels, which may be secondary to inadequate sun exposure, insufficient dietary calcium intake, smoking, alcohol abuse, excessive caffeine use, inactivity, numerous medications (especially steroids, Proton Pump Inhibitors such as Prilosec, Protonix, Nexium and excess thyroid hormone), as well as a number of diseases, including anorexia and bulimia, celiac/gluten intolerance, depression and inflammatory bowel disease. A loss of at least 1 ½ inches in height is also an important risk factor, as this is often due to asymptomatic vertebral compression fractures of the spine. There is some evidence that excess consumption of sodas and carbonated beverages is also associated with bone loss.

My office is now offering osteoporosis screening to the public at an affordable price. The test is covered by some insurance plans. The technology consists of an extremely low dose X-Ray of the wrist ("Peripheral Dual Energy X-Ray Absorptiometry or p-DXA), and is considered the gold standard screening test for osteoporosis, surpassing the accuracy of quantitative ultrasound. Studies done in the U.K. have shown that the amount of radiation exposure from a wrist DXA is $1/70^{\text{th}}$ the amount of background radiation the average person in Great Britain is exposed to every day! Although excessive meat consumption has been implicated in bone loss, we have found that a very high percentage of vegetarian patients also have osteopenia or osteoporosis, probably because of a lack of dietary calcium/ and or vitamin D.

Because hip and spine fractures can result in serious health problems and even death, any patient with an abnormal wrist DXA is referred for a DXA scan of the hip and spine. If either of these tests are abnormal, treatment is indicated, and in most patients, further testing is performed to try to uncover underlying medical conditions which might be causing bone loss. I typically order serum calcium, phosphorus, 25-hydroxy vitamin D and parathyroid levels, thyroid function tests, a 24 hour urine test for calcium, sodium, creatinine, and a celiac panel. Hormone levels are often assessed. Additional targeted tests are ordered for specific patients if their history, physical exam or clinical picture suggests another condition that can cause bone loss. I also order a serum N-Telopeptide, or NTX test, which tells me if a patient's bone loss is active. I also use this test to assess whether the treatment I have prescribed is effective. It usually takes a minimum of 18 months to 2 years to see a clinically significant change on a DXA scan, but only 3 months' time for a high NTX to revert to normal with proper treatment.

All patients are advised to walk at least 45 minutes daily, if possible with weights, and placed on 1200-1500 mg of Calcium a day, preferably AAA (Active, Absorbable Algal) Calcium or a blend of Calciums including Calcium Citrate with Magnesium and Boron. Supplemental Vitamin D3 is often required to bring the patient's 25-hydroxyvitamin D level to at least 55ng/ml—this level also protects against numerous cancers including breast, colon, prostate and melanoma. High doses of Vitamin K2 have dramatically reduced serum NTX levels in my patients. Several randomized, controlled studies published in well-known conventional medical journals have shown that Vitamin K2 reduces hip and spine fractures by 77% and 60% respectively without any serious side effects, whereas Alendronate (Fosamax) reduces fractures by no more than 48% and can cause severe inflammation of the esophagus, osteonecrosis of the jaw, and doubles the risk of atrial fibrillation. All of the supplements I prescribe, including highly absorbable, mycelized Vitamin D3, are available from my office, but it is best not to stop any medication on your own unless under medical supervision.

I am indebted to Romelo for suggesting I do the test. Knowledge is Power, as the old saying goes. I hate to think what state my bones would be in today if I hadn't. Call Irini, Andie or Shana at my office today to set up an appointment. It just might be the best 10 minute investment of time you'll ever make.

*We no longer offer Dexa Scans (Bone Density) in our office.