

Preventing Bone Loss Bill Yeary, ND

Significant bone loss or osteoporosis affects one in three women and one in five men over the age of 50. Men and women achieve peak bone mass in their 20s and 30s. Although bone loss is often thought of as an old person's problem, it can affect younger people who have hormonal difficulties, particularly women with menstrual abnormalities. With the onset of menopause, women begin to have an accelerated loss of bone. But excessive bone loss can also occur in men.

It is prudent for postmenopausal women, particularly in the early years after cessation of menses, to have a bone density study performed. If you are not being proactive to maintain bone density, then it would be prudent for bone density tests to be performed about every couple of years in the first few years after menopause.

What are the risk factors for excessive bone loss?

1. Surgical menopause (i.e., hysterectomy)
2. Prolonged absence of menstrual periods
3. Low calcium diet
4. Lack of weight bearing exercise
5. Excessive protein diets or when protein levels are too low
6. Cigarette smoking
7. Excessive alcohol use
8. Excessive caffeine use
9. Excessive phosphoric acid (sodas)
10. Lack of co-factors needed for preserving bone density (esp. magnesium, vitamin K, and vitamin D)

About Estrogen and Progesterone

The fact that osteoporosis is more common in women than men and that it becomes accelerated with menopause or removal of the ovaries, strongly suggests that osteoporosis is mainly due to a decline in female sex hormones.

Those female hormones, also present in men, are estrogen and progesterone. Bone cells that break down bone are activated by a loss of estrogen with a resulting increase of factors that stimulate removal of bone mass to the bloodstream. Thus estrogen works to prevent osteoporosis by the inhibiting of bone loss. Progesterone, on the other hand, promotes the building of bone and thus works toward the reversing of osteoporosis. Simply put, estrogen = preventing of bone loss, and progesterone = building of new bone. Dr. John Lee proved that natural progesterone cream reversed bone loss and was able to bring bone density back to 100 percent in his patients.

Studies have demonstrated increased bone mass and decreased fracture rate with synthetic estrogen. Because of this, synthetic estrogen derived from horse urine (premarin) has been

greatly advertised. But caution is recommended because synthetic estrogen treatment has significant risks that include an increased risk of uterine and breast cancer. It was also proven that use of synthetic progesterone along with synthetic estrogen did not diminish risk for cancer with the famous Nurses' Health Study, conducted at Harvard Medical School. Since natural progesterone cannot be patented, there is little economic incentive to conduct clinical trials that have been done with progestin drugs. Other possible side effects of synthetic estrogens include vaginal bleeding, breast tissue tenderness, and deep vein thrombosis. Estrogen unopposed by progesterone was found to cause water retention, increase in blood clotting, promote weight gain, oppose thyroxin (thyroid hormone), promote uterine fibroids, breast pain, fibrocystic breasts, increase in gallstones and liver dysfunction, increase in the risk for cancer.

Because of the side effects of synthetic estrogen, alternative practitioners normally recommend the use of progesterone in a natural form and the use of other forms of estrogen. These can be compounded into creams that are absorbed through the skin and thus bypass the liver. Quality products should be used that contain 900 to 1400 mg of natural progesterone per 2 oz container. Pre- and postmenopausal women should start with 1/4-1/2 tsp a day. Those with severe bone loss should use 1/2 teaspoon morning and night for the first container, followed by 1/4 tsp a day for each subsequent container. Premenopausal women who have PMS may consider taking 1/8-1/4 tsp of progesterone on days 15-26 of their menstrual cycle.

What about soy products?

A study was conducted at the University of Illinois at Urbana-Champaign over a 6-month period on 66 postmenopausal women to investigate bone density in response to the use of phytoestrogens derived from soy protein. The results showed significant increases in bone density. The lead scientist concluded that soy isoflavones show real potential for maintaining bone health. An appropriate amount of soy extract is 55-110 mg per day of active isoflavones (genistein, daidzen, and glycitein).

What about testosterone?

It is also important for pre and postmenopausal woman to consider testosterone. Women have less testosterone than men, but it is just as important to women as it is to men. Testosterone for women contributes to energy levels, proper muscle mass, sex drive, and preventing and treating bone loss. It is important to realize that men should utilize the same nutritional guidelines as women in regard to preventing bone loss.

Calcium and other minerals and vitamins

Calcium normally comes to mind when considering maintaining of bones. Certainly sufficient levels of calcium are needed. But most do not realize that sufficient amounts of gastric acid are needed to break calcium down for absorption. As we age our levels of stomach acid decreases and due to food not being properly broken down it results in a continual churning and thus indigestion. Many physicians erroneously prescribe acid blockers for the indigestion and thus contribute to nutritional deficiencies.

Other factors needed for building bones are zinc, boron, and silicon. But particularly vitamin D, vitamin K, and magnesium are important. Children are still growing bones and teeth and need a

ratio of 2 to 1 of calcium to magnesium. But adults need a ratio of approximately 1 to $\frac{3}{4}$ or perhaps 1 to 1 of calcium to magnesium depending primarily on stress and current tissue levels. Magnesium is particularly supportive for handling of stress, maintaining of blood sugar, relaxing of arteries thereby affecting blood pressure, and for neurotransmitter production. Some research shows that magnesium supplementation is effective in treating osteoporosis. Dr. Abraham increased bone density by 11% by decreasing calcium and increasing Magnesium. If the body continually receives excessive amounts of calcium in relation to magnesium, it may be deposited rather than eliminated. I have encountered women that have supplemented with high levels of calcium in an effort to prevent osteoporosis and began to feel heaviness in their legs. The heaviness went away when they discontinued the excessive calcium supplementation. The addition of 400-1000 IU of vitamin D3 is needed to ensure optimal calcium absorption. The inability to absorb calcium may be a major reason that calcium supplementation fails to prevent or slow bone loss. Vitamin D3 taken with calcium will promote absorption and assimilation of calcium into the bone matrix. Vitamin D3 increases the amount of bone-friendly osteocalcin, but only vitamin K can make it work properly. Vitamin D seems to have a synergistic effect with Vitamin K. Diets with more vegetables and less meat are higher in vitamin K. Vitamin K shows remarkable results against bone loss in postmenopausal. Suggested dose is 9 mg of K1 and 1 mg of K2 equally 10 mg of vitamin K per day. Do not exceed 100 micrograms per day of vitamin K if you are taking Coumadin or some other type of anticoagulant medication. Those who have experienced stroke, cardiac arrest, and those prone to blood clotting should first consult their physician before taking Vitamin K.

What about exercise?

Bone is a living tissue that continually renews itself. Bone requires regular stimulation from physical activity to prevent deterioration. The importance of exercise as a therapy for preventing and treating bone loss cannot be overemphasized. Weight-bearing exercises such as lifting weights and impact exercises such as a use of a rebounder or trampoline or brisk walking stimulate bone formation.

What about calcium from milk for children?

If your children are avoiding milk make certain they are drinking water instead of pop or juice, get at least 30 minutes of sunshine per day in the summer and take cod liver oil in the winter (for vitamin D) and supplement with equal amounts of calcium and magnesium. Should children avoid commercial milk? Yes. Should children drink goat's milk or raw, unpasteurized, non-homogenized, grass-fed organic cow's milk? Absolutely. (It would take another article to explain why.)

From the book of Proverbs

- The light of the eyes rejoiceth the heart: and a good report maketh the bones fat. (Proverbs 15:30 KJV)
- Pleasant words are as an honeycomb, sweet to the soul, and health to the bones. (Proverbs 16:24 KJV)
- A merry heart doeth good like a medicine: but a broken spirit drieth the bones. (Proverbs 17:22 KJV)

[This information is for educational purposes only and has not been evaluated or approved by the Food and Drug Administration and is not intended to diagnose, treat, cure, or prevent any disease.](#)