

# Living Bone Healthy

It's never too early, or too late, to guard your bones.

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By Carol Sorgen

**M**aintaining strong, healthy bones throughout your life is a lot like saving for retirement. The more—and earlier—you bank, the better off you'll be down the road. Of course, if you've neglected both your retirement and your bone accounts, better late than never is still the rule of thumb.

As we get older, normal aging causes a decline in bone density that occurs to varying degrees in otherwise healthy women (and men), explains Janet Maccaro, PhD, author of *A Woman's Body Balanced by Nature*. Osteoporosis, on the other hand, can cause a marked reduction in bone mineral density that can result in vertebral fractures. While there are many factors that may cause osteoporotic bone loss that is not associated with aging—such as major surgery, liver disease, steroid use, Crohn's disease, and cystic fibrosis, to name a few—the primary cause of osteoporosis is hormonal imbalance that interferes with bone-forming cells.

The hormonal imbalance can be addressed with progesterone (needed to maintain bone-building capability during perimenopause, menopause, and beyond), says Maccaro. Progesterone is available in traditional synthetic hormone replacement therapy or in the form of natural progesterone (available in a topical cream form), which Maccaro prefers because it has fewer side effects and is absorbed directly into the skin and into fat cells.

Estrogen may also be prescribed by some physicians to prevent bone loss, says Maccaro, although not everyone is a candidate for estrogen therapy since it may increase the risk of certain cancers. Premenopausal and postmenopausal women may also want to inquire about testosterone therapy, Maccaro adds, observing that testosterone improves and contributes to sex drive, stamina,



muscle mass, and preventing and treating osteoporosis. ehydroepiandrosterone is another hormone that has been shown to help prevent bone loss, she says.

“A woman should make it a point to meet with her physician at midlife and ask for a bone density test and, if osteoporosis is detected, a hormonal protocol can be tailored to help ensure her skeletal future,” says Maccaro.

Exercise, diet, and sunlight can also help you increase bone formation, says Georgianna Donadio, MSc, DC, PhD, medical educator and program director for the National Institute of Whole Health in Boston.

Those who exercise on a regular and ongoing basis have a significantly lower risk of osteoporosis, says Donadio, who recommends walking for at least thirty minutes a day. Strength training, movement techniques such as tai chi (which improves balance and coordination, thereby reducing the risk of falls), and even sexual activity can improve your bone health.



The less stress the better as well, Donadio says, since stress hormones deplete calcium reserves.

When it comes to diet, build up your bone reserves early, Donadio advises, by adding calcium-rich foods such as leafy green vegetables (for example, kale, escarole, collard greens, and bok choy); nuts (especially almonds and pistachios); fermented dairy products (such as yogurt and kefir); legumes; and seeds.

Limit sodas, Donadio adds, because too much sugar and phosphorus can also deplete calcium levels. Also on Donadio's "no-no list" are the following:

- antacids (we actually need the hydrochloric acid in our stomachs to aid in calcium absorption);
- excessive alcohol;
- sodium;
- nonfermented dairy products (such as high-fat cheeses); and
- excessive red meat.



Soy, which has been touted in recent years as a "superfood" for its preventive and therapeutic benefits for a number of conditions and diseases, including osteoporosis, is

now falling out of favor with some experts. In fact, says Kaayla T. Daniel, PhD, CCN, author of *The Whole Soy Story: The Dark Side of America's Favorite Health Food*, soy is now being linked to rickets and poor bones. "The main reason," Daniel explains, "is that soy contains phytates, a component that blocks mineral absorption." In addition, she adds, soy milk contains vitamin D in the form of D2, which is a vegetarian form of vitamin D that is poorly absorbed and utilized compared with vitamin D3. Soy also contains plant estrogens, which can interfere with natural hormone production and use in the body. Although bones do contain estrogen receptors, the hormone most needed for bones is progesterone.

"In that American women tend to be estrogen dominant and progesterone deficient, soy has little to offer," says Daniel.

If you prefer a natural approach, herbal supplements such as horsetail and red clover are another method of increasing calcium absorption and have long been used in indigenous populations for that purpose, says Donadio.

Maccaro also recommends the following supplements: vitamin B6, folic acid, boron, magnesium, zinc, trimethylglycine, and vitamin K, which slow calcium loss. (While vitamin K is found in green leafy vegetables, green vegetables, and vegetable oils, most people don't consume enough on a consistent basis to promote bone health. Most multivitamins don't contain vitamin K or have only minimal amounts. Before adding vitamin K supplements, however, consult with your healthcare practitioner first; people on blood thinners, for example, should not take vitamin K.)

"When it comes to the prevention of osteoporosis and management of the health of your current and future skeletal frame, you must become proactive, educated, and involved," says Maccaro. "It is important to find a nutritionally aware healthcare provider that will incorporate all available options and work with you to develop a tailored bone maintaining and building protocol just for you."

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