



By Letitia L. Star

# stand tall **sturdy bones at any age**

Preserving and building bones helps prevent osteoporosis, a serious condition where even a sneeze could cause a bone break. About 34 million Americans are at risk; approximately 10 million Americans already have this disease. Although postmenopausal women are particularly at risk, everyone needs to be working on preventing brittle bones. Here's a quick guide to strengthening bones, so you can move with confidence and live life to its fullest.

## **Did You Know?**

Shrinking isn't a natural part of aging. If you're getting shorter or your upper back is curving forward, osteoporosis may be advancing, according to the National Osteoporosis Foundation.

## **How to Bone Up**

Most people know that they need calcium. But are you aware of the other nutrients vital to bone health? These are magnesium, potassium, vitamins D, C, and K, as well as trace minerals boron and strontium.

Vitamin D is required for calcium absorption. Studies show that people with low levels of vitamin D have lower bone density, says the National Osteoporosis Foundation (NOF). ▶▶▶

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Magnesium is also important for bone regeneration.

“Use of calcium with vitamin D to enhance calcium absorption without a balancing amount of magnesium causes further magnesium deficiency, which triggers a cascade of events leading to bone loss,” explains Carolyn Dean, MD, ND, author of *The Magnesium Miracle*.

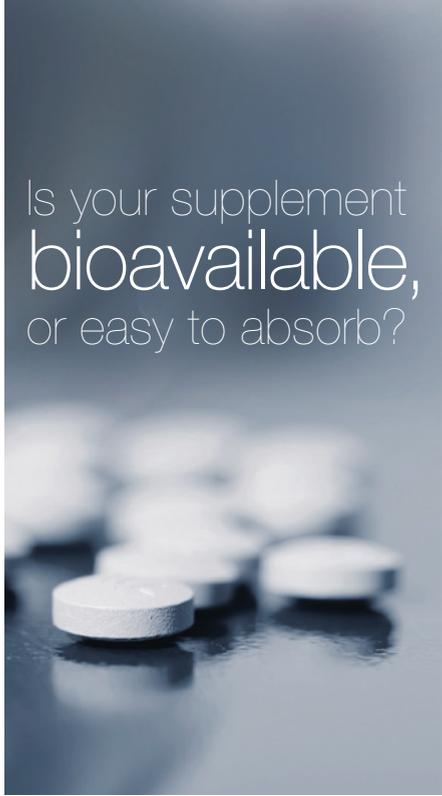
To build better bones, eat low-fat or non-fat dairy products, fortified foods, certain fish, dark leafy greens and other veggies, and fruits, the NOF recommends. Watch out for these bone-robbars: Colas, high-salt foods, high-protein diets, and excessive alcohol and caffeine consumption. Smoking, taking certain medications, and having an inactive lifestyle also endanger bone health.

### Shop Smart for Supplements

Though it's good to enjoy bone-building foods, it may not be possible to consume all the nutrients you need every single day. Hectic schedules and unexpected stressors can short-change our bones if we're not careful. Supplements can fill in the gap to make sure your daily intake is always adequate.

You may be amazed at the array of bone-building supplements available today in many easy-to-swallow forms: liquids, gel capsules, tablets, soft chews, powders, fizzes, and even scrumptious fortified dark chocolates. Consider how bioavailable, or absorbable, the supplement is. Some are labeled as food-based and bioavailable, or indicate that they contain a plant-sourced calcium instead of limestone. Others are identified as pre-acidified, and hence more easily assimilated and absorbed.

Proper digestion and absorption are critical considerations when finding the supplement that's perfect for your body. If you're following a diet without gluten or dairy, be sure to look for gluten-free or dairy-free formulas. There are also products without refined sugars, trans fats, corn syrup, wheat, yeast, artificial colors, or preservatives. If you need vegetarian or vegan supplements, carefully check the labels. Raw calcium can be found in vegetarian or vegan capsules. For kids, there are calcium chews in bright colors, appealing flavors, and fun shapes.



Is your supplement  
bioavailable,  
or easy to absorb?

Supplements to support sturdy bones typically feature calcium blends with magnesium, vitamin D, vitamin K, and a host of other nutrients (such as trace minerals). Some supplements may contain added enzymes and botanicals, including helpful herbal extracts such as stinging nettle and horsetail.

“Magnesium is one of the most abundant elements in the body, and especially in the skeletal system,” says Isaac Eliaz, MD. However, be aware that magnesium, because of its muscle relaxing qualities, can loosen the bowels. Dr. Eliaz says, “I recommend building up your dose from 250 milligrams per day up to 500 milligrams per day. Good forms of magnesium include magnesium citrate, orotate, and chelated magnesium.”

### Bone-Building Exercise

“Our bones are slowly shaped by the forces they withstand. The more active we are, the stronger our bones will be,” notes Miriam E. Nelson, PhD, in her book *Strong Women, Strong Bones*.

Walking and other low-impact activities such as swimming and biking are great for the heart. But walking in itself is not enough to help build bones, as Dr. Nelson's year-long research proved. However, her landmark strength training study at Tufts University, published in the *Journal of the American Medical Association*, showed that strength training just twice a week preserves bone density in postmenopausal women.

“The best program for osteoporosis is one that combines five different types of exercise,” she recommends. “Weight-bearing aerobic exercise, high-impact activities, and strength training help build bone. Just as important are exercises that address balance and flexibility.”

“Calcium and Vitamin D in the Treatment and Prevention of Osteoporosis” by P. Burckhardt, *Ther Umsch*, 3/12 ● “Changes in Parameters of Bone Metabolism in Postmenopausal Women . . .” by S. Kanellakis et al., *Calcif Tissue Int*, 3/4/12 ● “Effects of Training on Bone Mass in Older Adults: A Systematic Review” by A. Gomez-Cabello et al., *Sports Med*, 4/12 ● “Factors That Put You at Risk”; “How the Foods You Eat Affect Your Bones”; “Vitamin D and Bone Health”; “Why Bone Health Is Important,” National Osteoporosis Foundation, www.nof.org, 2011 ● Personal communication: Isaac Eliaz, MD, 3/12 ● *Strong Women, Strong Bones* updated edition, by Miriam E. Nelson, PhD, with Sarah Wernick, PhD (\$17, Perigee Trade, 2006) ● “Strontium Treatment for Osteoporosis,” WebMD, www.webmd.com, 2010

## consider this



Healthy, strong bones are important to ensure youthful mobility with age, but supporting connective tissues and cartilage is essential as well. Studies show that BeActive from **Health Direct** enhances exercise and muscle recovery.



**Membrell BONEhealth**, featuring natural ESC (EggShell Calcium) combined with vitamin D3 and magnesium, may improve bone mineral density. BONEhealth offers high absorbability and low heavy metal content.