Erickson Health

The Nation's Largest Integrated Wellness and Health Network for People 62+

GOOD HEALTH STARTS HERE

The Silent Dangers of Osteoporosis

Are You at Risk?

By Wendy J. Meyeroff THE ERICKSON TRIBUNE

The National Osteoporosis Foundation (NOF) says 44 million Americans either have osteoporosis or are at risk. In conjunction with May being Osteoporosis Awareness and Prevention month, this issue of Erickson Healthsm explains this potentially devastating condition, and offers relatively easy ways to prevent it, or at least mitigate its effects. (We urge you to copy or clip one or more articles and send them to the people you love.)

Understanding Osteoporosis

"Osteoporosis is a reduction in bone density and a disruption in microscopic bone structure, that allows bone to break easily," says Felicia Cosman, MD, the NOF's medical director. Easy bone breakage is the greatest danger of osteoporosis. It leads to disrupted quality of life, permanent disability, and even death.

The National Institutes of Health (NIH) estimates that osteoporosis is responsible for 1.5 million fractures annually, with 300,000 in the hip. Up to 25 percent of people remain institutionalized for at least one year after a hip fracture. Even a smaller fracture, like in the wrist, can be disabling. Think of trying to tie your shoes one-handed.

Two Major Risk Factors

Cosman says, "Age is one of the key risk factors, because our bone density starts declining after 30 or 35." With an aging population (by the year 2040 it is estimated those 65 and older will more than double, to 77.2 million), osteoporosis and bone

density problems are only likely to become more prevalent.

Gender also plays a role. Women tend to have lighter bone mass than men from the start, and menopause's hormonal changes speed their bone loss. John Marcelis, MD, medical director of Ann's Choice, a community build and operated by Erickson, says, "I talk to every female patient over 65 about their bone density and screening and their calcium and vitamin D intake.'

That doesn't mean men aren't affected. By around age 70, men start losing bone mass at about the same rate as women. Of the 10 million Americans already with osteoporosis, two million are men – and the numbers are only going to rise for both genders. Marcelis notes that he's especially careful to discuss osteoporosis with male patients who are in high-risk categories or who are already showing signs, like diminished height.

The Drug Connection

There are numerous ways to prevent osteoporosis, or at least minimize its effects. You'll find good information on how diet, exercise, and supplements can fight this disorder throughout this Erickson HealthSM section.

One concern older Americans and their doctors should have are medications that increase bone loss. Thyroid hormones, steroids (like Prednisone) and drugs like Lupron for fighting prostate cancer, are among those Cosman cites as increasing bone loss.

Older people must be wary of drugs causing dizziness or balance problems, since falls are the leading cause of fractures in our

Osteoporosis Risk Factors: Are You in Danger?

Check off all the answers that apply to you. Then get more information on what they mean at the bottom of P. 8

- □ I'm older than 70.
- □ I smoke.
- ☐ I don't eat many calcium-rich foods, like milk, tofu, and cheese
- ☐ I have a family history of osteoporosis or bone fractures.
- ☐ I don't know if any of my medicines cause bone loss.

older population. If you've been having such problems, notify your physician right away. Marcelis notes at communities built and managed by Erickson, the physicians have Centricity, an electronic medical records system. "Among other things, it alerts us as to whether a patient should have a BMD test."

The BMD Test

That BMD – bone mineral density – test, is an important preventive tool. Cosman says, "It's the most accurate way to determine if you have osteoporosis or are at risk." The most-used test, DXA, checks bone density at your hip and spine, the areas where fractures are most likely to occur. It's a simple imaging test, even lower level radiation than an X-ray.

Yet although this test is painless and quick, very few adults take one regularly. Cosman recommends having a BMD done every one or two years, "depending on how many risk factors you have". The more risk factors, the more vigilant you should be. The test is covered by Medicare if you're

Understanding Bone Density

The most important thing the BMD checks is your "T-score," comparing your bone density to a healthy 30 year old's to see how far off you are. This "standard deviation" (SD) is what you and your doctor need to know.

You're at risk of developing osteoporosis

if your BMD has an SD of 1 to 2.5 below the T-score. You have osteoporosis if your bone density is lower than a 2.5 deviation.

"There are indications we'll have a measurement that may be even more accurate later this year. It's an 'absolute risk calculator' that will look at someone's bone density, T-score, AND other risk factors specific to that person, and come up with a predication of just how high a risk that individual has," says Cosman.

New Medications

There are now medications called bisphosphonates (e.g., Fosamax and Actonel) for fighting osteoporosis. Cosman says, "They're taken once a week and are very effective and well-tolerated." Just make sure to follow instructions. Marcelis says, "They should be taken in the morning before eating, with lots of water and always in an upright position." There are indications there'll be a once-monthly tablet before this year is out and even a once-yearly injection (though Cosman says the latter is way down the road).

There's also a drug called Forteo, a genetically engineered hormone that actually repairs bone. However its longterm effects aren't known and it can have extreme side effects, so for now it is only being used short-term in patients with severe osteoporosis.

So Get Started

We hope we've convinced you of the

Bone Loss Fighting Diet

Choose Your Foods Carefully

By Kathy Chaney, RD, LDN THE ERICKSON TRIBUNE

The key to fighting bone loss at any age is a diet rich in calcium, the main element in bone composition.

Unfortunately, numerous surveys show most Americans don't get enough calcium in their diets. The National Osteoporosis Foundation (NOF) recommends older adults get between 1200 and 1500 mg. daily, but most get 600 mg. or less.

Fortunately it is easier than you think to get more calcium into your diet, even without supplements.

Milking Your Diet

Without a doubt, dairy products are your best calcium source. Nothing gives you the calcium bang for the buck that dairy does—and the best source of all is milk. One eight-ounce glass of whole milk provides 290 mg. of calcium, skim milk has 302 mg. That's a significant portion of your daily needs right there. Sadly, most older Americans don't drink enough milk. Some don't like the taste, others never developed the habit, Still we all know it's never too late to change a

Calcium-Rich Foods

| 0.5 cup part-skim ricotta | 337 mg. |
|-----------------------------|---------|
| 1 cup cooked collard greens | 226 mg. |
| 3.5oz. bone-in sardines | 351 mg. |
| 0.5 cup tofu | 204 mg. |

bad habit. Here are some fast tricks for incorporating regular or low-fat milk into your diet:

- ◆ Add a little to your coffee.
- ◆ Buy chocolate milk or (to be more cost-effective) add a little chocolate syrup to regular milk.
- ♦ Use it to make delicious soups, like corn chowder.
- ◆ Use non-fat powdered milk as a thickener for stews, casseroles, and soups.
- ◆ Make a delicious smoothie by adding fresh fruit. (Very good idea now that summer's approaching.)

see Stronger Bones page 8

How Can You Build Your Bone Density?

Your Free Erickson HealthSM **Guide Offers Ideas**

Erickson Healthsm, the nation's largest and most completely integrated wellness and health system for adults 62-plus, offers many programs that can help you fight osteoporosis and bone fractures.

The Erickson Healthsm Guide will show you what we mean. Among the options you'll find:

- ◆ Water aerobics in our indoor pools
- ◆ Balance programs run by trained physical therapists and wellness counselors
- ◆ Tai Chi and other exercise options in our on-site Fitness Centers



◆ Walking, hiking, dancing, and other weight-bearing activities

All this and more, overseen by Erickson Healthsm doctors, nurses, and other health professionals trained in the specific health needs of Americans 62-plus—including fighting osteoporosis.

To get your FREE Erickson Healthsm Guide or for more information on Erickson Healthsm call the Erickson community nearest you (see the listing on Page 2) or visit our web site: www.EricksonHealth.com.

Understanding Supplements

By Wendy J. Meyeroff THE ERICKSON TRIBUNE

It's critical for older Americans to get calcium and vitamin D to fight bone loss, and to do so, more Americans have turned to supplements. By 2001, calcium supplement sales hit had a record \$775 million.

Unfortunately, too many consumers don't get what they pay for. One independent lab's testing found only 20 percent of calcium supplements delivered what they promised. To get your money's worth, there are three questions you should ask about your supplements:

- 1. How much vitamin D does it provide?
- 2. How much actual calcium (called *elemental* calcium) does it contain?
- 3. How much of the elemental calcium actually gets into your

The Vitamin D Question

Most stories on calcium supplements start by talking calcium, but at **Erickson Health**SM we know there's another important issue: vitamin D. "Vitamin D levels not only affect your bones," says Felicia Cosman, medical director of the National

Osteoporosis Foundation (NOF). "We now think it affects muscle function and even fights cancer."

John Marcelis, MD, medical director of Ann's Choice, a community built and operated by Erickson, adds, "Lack of vitamin D causes osteomalasia, a distortion of bone architecture. It also affects the body's ability to absorb and metabolize calcium."

It's recommended that older Americans get 800 I.U.s (International Units) of vitamin D, twice the 400 I.U.s generally recommended for adults. Supplements are so important because there are few other reliable sources of vitamin D.

There are few natural food sources. Milk and some other foods are enriched with it. It's also found in certain saltwater fish, like salmon and mackerel.

Otherwise, humans' main source of vitamin D is sunlight. We only need about 15-20 minutes exposure daily to get our vitamin D allotment. Unfortunately now that most of us spend our lives indoors, not out, that's a problem.

Besides, says Cosman, "When we do go outside, we generally block our exposure by wearing protective clothing and using high-intensity sunscreens." Cosman would never suggest we

expose ourselves to skin cancer so as to get our vitamin D allowance, but it is why well over 50 percent of older Americans are deficient in this nutrient.

Looking at Calcium

Calcium supplements contain either calcium carbonate and calcium citrate. You'll find the carbonate form most often, in products like Os-Cal and even Tums. Citracal is a citrate.

There are two misleading things about calcium supplement labeling. First, a 1000 mg tablet generally doesn't deliver that amount. Carbonates deliver about 40 percent of elemental (actual) calcium into your system; citrates only 21 percent. There's really only 400 mg. of elemental calcium in that 1000 mg carbonate tablet—and only 210 mg in the citrate.

Second, check the supplement's serving size on the label. You might find you need several tablets to get the dosages promised. Example: one tablet might contain only 200 I.U. of vitamin D, instead of the 800 you're seeking.

The Absorbability Issue

Two other critical factors are the pill's solubility and absorbability. "Solubility is how much will

Erickson File Photo

dissolve in your stomach," Cosman explains. "Absorbability is how much finally gets into the bloodstream."

It is disputed whether citrates or carbonates are better absorbed. As for solubility, look for the USP label; it shows the product has met U.S. Pharmaceopeia standards in area such as purity, strength, and solubility. Or try this home test: a supplement dropped into a glass of vinegar and stirred occasionally should dissolve in 30 minutes.

What to Do

Be very careful of a product that's been highly promoted for years now: "coral calcium". Not only is there no proof it's particularly healthful, there are indications some brands are so poorly manufactured they may actually be dangerous. At least one highly advertised product has been cited by both the FTC and FDA for making outrageous marketing claims.

The bottom line: get as much calcium as you can from your diet. Look for supplements containing both calcium and vitamin D at a reasonable price. Tums E-X is inexpensive, but contains no vitamin D. Candy-like Viactiv provides both nutrients, but is more expensive and gets it taste from lots of sugars. Try to find a well-respected brand AND the USP label. Finally, always check the serving size: how many tablets do you need daily to get the nutrients you're seeking?

Exercise Your Way to Stronger Bones

By Wendy J. Meyeroff THE ERICKSON TRIBUNE

Bone is living tissue, just like muscle, and like muscle, it gets stronger as you exercise it. Exercising to combat bone loss is ever more critical as we age. Before any exercise program, check with two people: your doctor-to get a good sense of any physical restrictions, and a skilled physical therapist or exercise instructor trained in working with older adults.

Christine Soares, P.T., is a physical therapist at Renaissance Gardens, the health care neighborhood at Brooksby Village, a community in Massachusetts. She is very careful to check a resident's complete health picture before she begins any program Besides checking for problems like heart trouble or diabetes, she says, "I want to see their bone density test, so I'm sure just how much stress their bones can take."

Weight-Bearing Exercises

Weight-bearing exercises are most recommended for improving bone strength. Soares says, "We're not talking about lifting 10 or 20 pounds.

We're talking smaller increments and, even more important, the number of repetitions." The amount of weight and the number of reps should vary by individual. That's why an assessment by a professional.

Soares points out, "Walking is a weight-bearing exercise." Think how much weight your feet and spine are supporting in keeping you upright! The reason so many adults shrink or hunch over is they already have small spinal disk fractures. Walking doesn't interest you? Try hiking, golf, or even dancing.

The Fall Factor

Soares says, "Falls are one of my big bug-a-boos." People with low bone density are more likely to experience disabling fractures once they fall. She works very hard to make people understand the many factors contributing to falling.

Among them: "Their medications make them dizzy. They're dehydrated, because incontinence fears made them restrict their fluid intake. They suffer from 'postural hypotension'—their blood pressure falls if they go from lying down to sitting or sitting to

standing, too quickly," says Soares.

There are also obstacles—like throw rugs—at home. That's why, Soares says, home visits is a critical service at Renaissance Gardens. Experts find and eliminate as many fall-inducers as possible.

Paul Bell, PT, CSCS, once worked at the Charlestown community supported by the Erickson Healthsm system, and is now director of rehabilitative services for Orthopedic Specialty Centers of Baltimore, Md. He says, "Improving an older person's gait is critical to preventing falls." Too often they shuffle, which makes it easy for them to trip. Whereas a younger person can often right themselves with no problem, once someone older trips they often go over like a tree."

One trick Bell teaches older adults: marching. "It forces them to pick up their feet." They can do it up and down a hallway or even while watching TV.

Go Get Started

Ultimately both experts say it's critical to start an osteoporosis-fighting exercise program sooner than later. They emphasize that you're not just in danger if you fall. If you're truly osteoporotic, your hip could fracture while

you're standing—and then you'll fall.
Bell says, "Find a class or group to help you stay motivated." Soares agrees, saying, "Increased strength, balance, and bone density are not long-term benefits. To maintain them, you must maintain your exercise program."

From Stronger Bones page 7

Other Dairy Tricks

 Don't forget there are other dairy sources of calcium. Read labels carefully, look at the table on page 7, choose your favorites and try these tricks:



◆ Dress up plain yogurt with fresh or frozen fruit, add some raisins-find something you like to make it interesting.

- ◆ Use sliced cheddar for grilled cheese sandwiches.
- ♦ Make lasagna with part-skim ricotta.

Beyond Dairy

Remember that calcium also is found - though in lesser amounts – in other food sources. Among them:

- ◆ Dark green leafy vegetables, like collard greens and
- ◆ Tofu—Be brave and try it. Just check labels; different brands offer different calcium levels.
- ♦ Sardines or canned salmon with bones mashed in.
- ◆ Fortified foods, like orange juice and certain cereals. Even some bottled water now has calcium!

The Lactose Argument

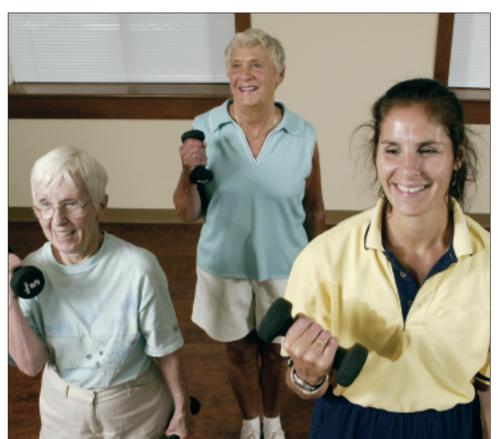
Some older Americans avoid dairy products because they're lactose intolerant. Lactase is an enzyme that breaks down lactose in milk products. Without that enzyme, people can't absorb lactose—a sugar—properly and dairy causes stomach problems.

Fortunately, there have been solutions for lactose intolerance for years, including tablets to aid in digesting the enzyme and lactose-free soy milk or ice cream products.

Get Creative

Some people worry about their cholesterol or fat levels, which is smart of course. Look for lower-fat alternatives. Many times the low-fat food, like ice milk instead of ice cream, and yogurt instead of sour cream, is a better calcium source anyway.

Kathy Chaney is a dietitian and nutritionist at Renaissance Gardens at the health care neighborhood at Oak Crest, a community in Parkville, Md, built and managed by Erickson.



To maintain bone strength, find a weight-bearing exercise you will enjoy continuing regularly.

Erickson File Photo

Understanding Osteo's Risk Factors

The more risk factors you checked off on P. 7, the more likely you are to develop osteoporosis. You may even have it already. Here's why:

Age—Women are four times as likely as men to develop osteoporosis between ages 50 and 70. After that it becomes an equal opportunity disease with both sexes at equal risk.

Smoking—Smoking doubles your risk of osteoporotic fractures.

Calcium-deficient diets—Most adults get less than 600 mg. of calcium daily - but fighting bone loss needs between 1200 and 1500 mg daily.

Family history—Like most conditions, osteoporosis runs in families. If you don't know if there's a specific history, ask

yourself if you had a lot of relatives with hip or other fractures, or "dowager's hump". The hunched-over look of the latter can be a sign of disk fractures that have already occurred.

Certain medications—Check our "Silent Dangers" article (and ask your doctor) to find out if any drugs you're taking might cause bone loss.