



# OSTEOPOROSIS NEWSLETTER

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Editor

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## FDA Data Finds No Heart Risk from Bone Drugs

Clinical trial data from and was considering six months and three four drug makers shows whether conducting years. no overall risk of heart further studies to problems in patients investigate the risk were “Across all the studies, taking certain drugs to feasible. no clear association treat osteoporosis. between overall

The U.S. Food and Drug Administration (FDA) has reviewed clinical trial data from four drug makers and found that heart rhythm problems were rare within each study. FDA officials began looking into concerns of abnormal heart beats in women taking the drugs in October 2007 following reports of serious atrial fibrillation, a type of abnormal heartbeat, in the New England Journal of Medicine. While the agency plans to continue to monitor possible heart problems in patients taking such bone drugs, it concluded that doctors and patients should continue using the drugs as necessary.

The drug companies are Merck & Co’s Fosamax, Roche Holding AG’s Boniva, Novartis AG’s Reclast and Procter and Gamble Co’s Actonel. Since then, the agency has collected data on nearly 40,000 patients.19,687 were given a bone drug and 18,358 were given a placebo. The clinical trials were between the drugs as necessary. While the agency plans to continue to monitor possible heart problems in patients taking such bone drugs, it concluded that doctors and patients should continue using the drugs as necessary.

## Next B.O.N.E.S. Meetings

Tuesday, April 14 - Dr. Binkley - The New Research Findings and Their Implications  
Tuesday, May 12 - Bone Density Scans - What They Are and Why They are Important

**B.O.N.E.S. SUPPORT GROUP**  
will meet on  
**April 14th at**  
**Oakwood Auditorium**  
**6209 Mineral Point Road**  
**Madison**

**1:30-2:30 p.m.**

**Questions? Call 265-6410 for information.**

# Fruits and Veggies May Strengthen Bones <sup>2</sup>

Eating a lot of protein and cereal grains causes excess acid production in the body which could increase calcium excretion and result in weakened bones.

A new study finds that boosting alkali levels with a pill or by consuming plenty of fruits and vegetables can strengthen bones.

As older adults age, they become less able to excrete the acid. One way the body may counteract the acid from our diets is through bone resorption, a process by which bones are broken down to release minerals such as calcium, phosphates

and alkaline (basic) salts into the blood. Unfortunately, increased bone resorption leads to declines in bone mass and increased fracture risk.

“When fruits and vegetables are metabolized they add bicarbonate, an alkaline compound, to the body,” said the author of the study, Dr Bess Dawson Hughes, MD, of Tufts University in Boston Mass. “Our study found that bicarbonate has a favorable effect on bone resorption and calcium excretion. This suggests that increasing the alkali content of the diet may attenuate bone loss in healthy older adults.”



Endocrine Society, news release, Dec 5, 2008

## Get a Workout Without Getting Up

You might think that you don't have time to exercise or maybe you don't feel like it. Here are some ways that you can build strength, flexibility and balance without leaving your chair.

These qualities help you:

- Do daily tasks such as housework and climbing stairs
- Avoid falls
- Prevent or recover from injuries

Try these moves the next time you are watching TV, reading or sitting at the computer. Use slow steady movements and keep breathing as you move.

**Grip strengthener.** Squeeze a racquetball, tennis ball or stress ball in your hand as hard as you can. Hold for three to five seconds. Slowly release. Repeat 10 times per hand. This exercise strengthens hand muscles which can make it easier to open lids on jars. It can reduce stiffness in people with arthritis and can also reduce stress.

**Knee extension.** While seated, rest the balls of your feet and your toes on the floor. Slowly extend one leg as straight as you can in front of you. Hold this position, with your foot flexed toward you, for one to two seconds and then

lower. Alternate between right and left legs. Do eight to 15 repetitions.

**Triceps dip.** Grasp the arms of a stable chair, keeping your back straight. Rest only your toes on the floor. Push your body up off the chair with your arms, trying not to use your legs or feet. Slowly lower back down to a sitting position. Repeat eight to 15 times.

*Exercise: A Guide From the National Institute on Aging.* National Institute on Aging, April 2004.

Begin doing what you want to do now. We are not living in eternity. We have only this moment, sparkling like a star in our hand and melting like a snow-flake."

Francis Bacon, Sr.

Osteoporosis tends to be considered as primarily a women's disease. Previous studies have revealed new insights about male osteoporosis and current research is adding new information and understanding.

These studies suggest:

- Men have higher mortality rates after hip fracture than women. 1-year mortality rates for male veterans have been reported as high as 29.9%.
- Though it is controversial, men may experience fractures at higher BMD (bone mineral density) values than women.
- Fracture risk for men increases with age, but the fracture incidence peaks about 10 years later in men. Men have a lifetime risk for fracture after age 40 of 25% overall; and those with T scores below -2.5 have a risk of 42%.
- Approximately 30-60% of osteoporosis in men is due to secondary causes, including most commonly alcohol, chronic glucocorticoid (e.g. prednisone use) excess and hypogonadism (testosterone deficiency) among others.

- Estrogen and testosterone have different effects on the bone. Estrogen conserves bone mass by suppressing bone turnover whereas testosterone reduces bone resorption and increases periosteal apposition (a process by which bones get larger with age). It is widely accepted that the decline in estrogen among postmenopausal women produces accelerated bone loss. Although men do not have this abrupt decline in estrogen, they do experience a lower phase of bone loss with aging that may be related to changes in calcium homeostasis (equilibrium) and declining testosterone.
- Vitamin D is important for maintaining bone health and calcium homeostasis. Vitamin D aids the absorption of calcium. Insufficient vitamin D has been recently implicated in a variety of other conditions and is an osteoporosis risk factor in men and women.
- BMD (bone mineral density) is as helpful in assessing fracture risk in men as it is in women. The use of clinical risk factors provides benefit above BMD alone. The clinical risk prediction tool

(FRAX) calculates a 10 year fracture risk bases on age, gender, personal history of fracture, parental history of hip fracture, height, weight, use of glucocorticoid therapy, secondary osteoporosis, rheumatoid arthritis, current smoking, an alcohol intake of three drinks per day or more in addition to low femoral neck BMD.

- The NOF recently recommended BMD measurement in men age 70 and older. The age to test for osteoporosis may vary depending on risk factors. In one of the studies it was cost effective for men age 65 years and older with a prior fracture and for men age 80 years and older without a prior fracture to undergo screening and treatment for osteoporosis.

Significant benefits of these ongoing studies will include at what age to test for osteoporosis, determining the need for treatment and the best treatment option.

Curr Opin Rheumatol. 2008;20(4):423-428.

## Research Brief

A study reported in the October 2007 issue of the American Journal of Clinical Nutrition showed that tea drinkers ages 70 to 85 years lost 1.6% of BMD (Bone Mineral Density) compared to a loss of 4% for non-tea drinkers over 4 years. The study also showed that the mean total BMD was 2.8% greater in older monen tea drinkers that non-tea drinkers. These findings support other studies showing higher BMD for tea drinkers than non-tea drinkers.

## Research Considerations

As you read research related information in these newsletters and elsewhere, please remember that it reflects the results of one or several studies on a certain date. Additional studies may confirm or refute the findings or provide additional information. Before you take action based on the information, consider the source, compare to other information and possibly consult your physician.



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# RECIPE FILE

## **Cheesy Chicken Divan**

### **Ingredients**

1 lb Broccoli, fresh, chopped  
1 1/2 cup cooked chicken breast, diced  
10 3/4 oz Soup, cream of broccoli, 98% fat free, condensed, canned  
1/3 cup fat free milk  
1/2 cup Cheese, cheddar, sharp, shredded  
1 tbsp butter, melted  
2 tbsp bread crumbs

### **Directions**

- 1 Preheat oven to 450 degrees F.
- 2 Place the broccoli in a saucepan with enough water to cover. Bring to a boil, and cook 5 minutes, or until tender. Drain.
- 3 Place the cooked broccoli in a 9 inch pie plate. Top with the chicken. In a bowl, mix the soup and milk, and pour over the chicken. Sprinkle with Cheddar cheese. Mix the melted butter with the bread crumbs, and sprinkle over the cheese.
- 4 Bake in the preheated oven for 15 minutes, or until bubbly and lightly brown.

6 Servings

[www.dlife.com](http://www.dlife.com)