



Calcium Scare: A False Alarm

"I just don't know what to do about my calcium . . ."

This complaint has been heard thousands of times across North America these past two years, as women have turned to their physicians for advice about protecting themselves from osteoporosis. The problem started with extensive media coverage of a study published in the *British Medical Journal*, stating that calcium supplement use was associated with a slightly increased risk of heart attack. Many stopped taking their calcium supplements entirely, and physicians, blindsided by the report, immediately became more cautious about recommending use of calcium supplements.

The problem was a potentially serious one, as recommended calcium intakes for United States adults range from **1,000 to 1,500 mg per day**, with food typically providing only about half that amount. At least three separate Consensus Development

Conference Reports dating back to as far as 1984, all produced by the National Institutes of Health, had recommended calcium supplement use, both for total nutrition and specifically to reduce risk of osteoporosis.

The evidence for benefit was – and still is – very strong. With calcium and vitamin D supplements, taken regularly, risk of osteoporotic fracture is reduced by 40 to 50 percent!

The fear fanned by the media had an immediate effect. **Calcium supplement use has dropped by about 14 percent in the last two years.** Sadly that means that some otherwise preventable fractures have occurred, many of them producing permanent harm and disability.

Osteoporosis experts were quick to respond to the alarm over calcium supplements. They pointed out serious flaws in the methods used by the investigators of the studies that reported finding a link between supplement use and heart attack risk. Unfortunately their refutation, though published in the medical literature, produced almost no media coverage. Today many patients remain confused, and calcium supplement use remains lower than it should be.

Finally, this fall, three definitive publications are appearing in major nutrition and osteoporosis journals, concluding that the **calcium supplement scare was a false alarm** – that there is no increased risk of coronary disease in individuals taking



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How much do you need each day?

The Creighton University Osteoporosis Research Center recommends the following guidelines established by the Institute of Medicine Dietary Reference Intakes from 1998:

Age Group	Calcium Intake (mg/day)
Children (1 - 3 years)	500
Children (4 - 8 years)	800
Teenagers (9 - 18 years)	1,300
Pregnant/breastfeeding women (younger than 18)	1,300
Pregnant/breastfeeding women (18 and older)	1,000
Women (19 - 50 years)	1,000
Women (51 and over)	1,200
Men (19 - 50 years)	1,000
Men (51 and over)	1,200

recommended amounts of calcium supplements. The researchers who wrote these “all clear” publications reanalyzed the many papers published on this topic and found that there was **simply no significant evidence of a connection between calcium supplements and heart attacks**. The authors of the original articles raising the alarm had acted in good faith, knowing that concealing possible side effects would have been irresponsible. They had simply got it wrong. Most of the problem lay in the lack of balance in the media coverage. **“Calcium is bad for you” gets a lot more public attention than “Oops! We were wrong. Calcium is OK after all.”**

Here’s something to remember and think about. Suppose the researchers raising the scare had been right. Suppose that their data really did show an increased risk of heart disease in the patients they studied. Does that risk then apply to everybody?



When there are literally hundreds of studies showing a benefit – as is the case for calcium – a single negative study, even if well conducted and appropriately interpreted, doesn’t erase all that positive evidence. It’s just a single negative study. We all recognize that some people are more likely than others to develop heart trouble. If we perform enough calcium studies, sooner or later we will do one in a group of individuals who, just by luck, are prone to heart attacks. Such a study, if taken by itself, would suggest the treatment is actually harmful. But it’s not “by itself.” **One negative study doesn’t mean that all the positive studies are suddenly wrong.** We have to be guided by the preponderance of the evidence. And in this case that preponderance was – and is – no cardiovascular risk.

In 2004 the U.S. Surgeon General, in his report on bone health and osteoporosis stressed that **“Calcium has been singled out as a major public health concern because it is critically important for bone health and the average American consumes levels of calcium that are far below the amount recommended”** As all the official statements on this topic stress, the best way to get the calcium we need is from food (because foods contain the many other nutrients needed for calcium to produce its full benefit). What we can’t or won’t get from food, we should get from supplements. That’s still true today, especially with the new reassurance that calcium supplements are safe after all.

“. . . I know I should drink more milk, but I can’t. I am lactose intolerant”

Is that true? What is lactose intolerance? What does it mean for patients with osteoporosis?

Visit our website for more information on lactose intolerance at **osteoporosis.creighton.edu**.

Here come the Holidays!



Need a holiday gift for a friend or loved one? Consider making a donation in their name to the Creighton Endowment for Osteoporosis, in memory of Sister Anne Evers.
Donation form on the back.

Looking for a unique gift?

Consider **Chico's** located at Shadow Lake Towne Center
72nd Street & Highway 370, Papillion Neb.

You're invited to the **"Bring on the Bling"** fashion show on **Thursday, Dec. 13, from 5 to 9 p.m.** at Chico's (Shadow Lake Towne Center). The fashion show starts at 6:30 p.m.

Refreshments will be provided and you can enter to win a \$25 gift card from Chico's.

10 percent of all sales that day will go to
The Mission of the Osteoporosis Research Center.

If your holiday schedule is already full on Thursday, Dec. 13, you can stop in another day that same week and let the store manager know that your purchase is to benefit the **ORC** and they will apply your purchases to our total sales.

To find out more information,
or to confirm that you'll be there, please contact:
Diana Zeck at 402.339.9040 or **Susan Recker 402.280.4810.**

Opportunities to Participate

The Creighton University Osteoporosis Research Center would like you to consider participating in one of our research studies. Below is a list of our current studies in which you might be interested. Please feel free to pass this letter on to friends, family and coworkers who may also be willing to participate.

Type I Diabetes Study for Children

This research study is trying to determine if Type 1 Diabetes Mellitus affects gain in bone mass in children.

- 10-15 year old boys and girls diagnosed with Type 1 Diabetes
- Procedures and evaluations are pain free, weekday and weekend appointments
- \$75 gift card for each completed visit

Young Women's Bone Health Study

This research study is working on developing treatment options for premenopausal women with lower bone density and for women with history of a broken bone (fracture) as an adult.

- Females, 20-45 years of age
- Premenopausal with regular menstrual periods
- \$400 monetary stipend for study completion

Vertebral Fracture Study

This research study is comparing two FDA approved medications to see if one of them will be better at preventing future vertebral fractures.

- Postmenopausal women age 45 or older
- History of vertebral (spinal) fractures
- \$300 monetary stipend for study completion

Bone Quality in Postmenopausal Women

This research study is looking at the causes of osteoporosis in postmenopausal women.

- Females, 45-80 years of age
- Postmenopausal for at least four years
- \$300 monetary stipend for study completion

If you are interested in learning more about any of these studies, please contact us at **402.280.2663** (BONE) or toll free **800.368.5097**. Please leave a message with your name, phone number and best time for us to call. Or visit osteoporosis.creighton.edu and click on **ORC Research Opportunities**.

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Know someone who might be interested? Please pass this on . . .

Recent Donations to the Creighton Endowment for Osteoporosis

In Memory of

John A. Dowell, M.D.

From: Linda and Harry Jordan
(family of the late Hazel and Jack Anderson)
in honor of Susan Dowell's caring help

John A. Dowell, M.D.

From: Dr. and Mrs. Robert R. Recker

Tim Ryan

From: Mary Ann Ryan

In Honor of

Margaret M. Lyons

From: Marilyn Crane

Katie Recker's Birthday

From: Marlene D. Petter

In Celebration of

The 50th Anniversary of
Nonie and Norbert Reischl
From: Jim and Jane O'Brien

If you are interested in making a donation, please send a contribution to:

Creighton Endowment for Osteoporosis

In memory of Sister Anne Evers

601 North 30th Street, Suite 4820

Omaha, NE 68131

*If you have any questions please contact Susan Recker at 402.280.4810
or visit osteoporosis.creighton.edu.*



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Research Center

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THE GIFT OF GIVING

Consider a donation in honor of a loved one to the Osteoporosis Research Center

Just mail this form to:

Creighton Endowment for Osteoporosis
In memory of Sister Anne Evers

601 North 30th Street, Suite 4820
Omaha, NE 68131

A Contribution is enclosed to the Sister Anne Evers Endowed Research Fund

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