

## Calcium and Vitamin D in the News

With advances in science, healthcare guidelines often change. Sometimes new guidelines appear to be in conflict with old ones, and different organizations develop different guidelines for the same condition. So it is with calcium and vitamin D.

The latest recommendations for daily calcium and vitamin D intake were released in November 2010 by the Institute of Medicine (IOM). The IOM has an advisory role on healthcare issues for the US federal government, and in this case, for Canada as well. A committee of experts reviewed the evidence in over 1000 scientific papers and listened to testimony from scientists and stakeholders before reaching conclusions that were surprising and provocative. The recommendations of the IOM are important because they are widely used by government agencies for activities such as setting standards for school meals and specifying the nutrition label on food products.

The IOM report, which can be obtained at [www.iom.org](http://www.iom.org), stated that most Americans are currently getting adequate amounts of calcium and vitamin D, with the notable exception of girls age 9-18, who often do not get enough calcium. This is contrary to the popular belief, supported by medical research, that many or most of us have a deficient intake of calcium and vitamin D. The IOM also stated that there is emerging evidence that excessive intake of calcium and vitamin D

may be harmful. It was found that these nutrients were important for skeletal health, while the evidence that they were helpful for other conditions, such as prevention of cancer and improved muscle strength, was felt to be inconclusive. Excessive calcium might increase the risk of kidney stones and too much vitamin D could cause kidney problems.

The recommended calcium and vitamin D intake and the maximum safe intake varied by age. For example, for women age 51-70, the recommendation for calcium was 1200 mg/day (maximum 2000 mg/day), with vitamin D 600 IU/day (maximum 4,000 IU/day). These values are similar to what is recommended by the National Osteoporosis Foundation (NOF), with the principal exception that the NOF suggests a target vitamin D blood level of at least 30 ng/ml, while the IOM uses a value of 20 ng/ml.

What are we to do with these recommendations? First, remember that these are guidelines for the general public, not "laws" for every individual person. Some of us may need more or less than the recommended intake, depending on our needs. Dietary intake of calcium and vitamin D from sunlight must also be considered. Second, just because something is good for you does not always mean that more is better. Too much of almost anything in life may be harmful. Finally, work with your physician to determine what is best for you.

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## Clinical Research

*Our clinical research program is recruiting patients to participate in studies to test new medications and evaluate new uses for currently available drugs. By participating in a study you will have the opportunity to use one of these medications, have free examinations and tests, and receive reimbursement for your time and travel. If this interests you, please take a few minutes to read the major criteria for participation.*

*If you think you may qualify for a study or are interested in participating in a research study, call a study specialist at (505) 923-3232.*

*Feel free to pass this newsletter to a friend or relative who may be interested. The drug study information will be updated quarterly, since we are continually starting new studies and closing out old ones. We do studies for high blood pressure, high cholesterol, osteoarthritis, osteoporosis, heartburn, GERD, irritable bowel syndrome and others. Please feel free to call and give your information to a study specialist for consideration for future studies. If there is nothing for you now, there may be next time.*

### Nerve Pain Due to Shingles or Trauma

A research study of an investigational medication for chronic neuropathy due to shingles or trauma. You may be eligible to participate if you are:

- Are between 18 and 80 years old
- Suffering from chronic pain due to shingles or trauma for at least 6 months and are not satisfied with current treatments

JNJ-NP2001

### Diabetes

A research study of an investigational medication for diabetes. You may be eligible to participate if you are:

- Are a diabetic age over the age of 18
- Your diabetes is not adequately controlled on your current regimen
- Your current regimen does not include Insulin, Januvia or Byetta

Lilly-GBDN

### Diabetes

A research study of an investigational medication for diabetes. You may be eligible to participate if you are:

- Are a diabetic age 55-85 years old
- Your diabetes is not adequately controlled on your current regimen
- Do not have osteoporosis

JNJ-3010

### Male Osteoporosis

This is a research study of an investigational medication for osteoporosis. You may be eligible to participate if you are:

- A man over age 45-85
- Have osteoporosis that has not been treated

MK053

### Healthy Women Osteoporosis Study

This is a research study to study the effect of a medication on bones. You may be eligible to participate if you are:

- A postmenopausal women 45 to 75 years old
- Have not been diagnosed with osteoporosis
- Are at least 5 years post menopausal

Takeda 390104

### Diabetes On Metformin Only

This is a clinical trial to assess the safety and efficacy of an investigational Medication. Study may last up to 1 year. Study related medication is provided at no charge and time and travel expenses are available for qualified participants. You may be eligible to participate if you:

- Are age 18 or over
- Are a diabetic
- Currently taking only metformin for diabetes control

Shionogi



**Woman  
To  
Woman  
By  
Julia Chavez, CNP**

**Diabetes, Diet, and Dietitians, Oh My**

If you have developed diabetes or you have trouble controlling your weight, who are you going to talk to? As a person with diabetes it becomes complicated and stressful trying to decide what you can or cannot eat. Other factors involved in dietary decisions include controlling your blood sugar as well as eating the healthiest foods to control your blood pressure and your cholesterol. All of these decisions can add to the stress level, which can make the diabetes worse.

Your provider may refer you to a Registered Dietitian (RD) or to a Certified Diabetes Educator (CDE) so that you can have the benefit of the specialized care that you need. A registered dietitian (RD) is a food and nutrition expert who has at least a bachelor's degree and probably a master's degree in a course of study that has been approved by the American Diabetic Association. Most doctors do not have the training, education, or time to provide this service, so if you are referred to a CDE or an RD, make the most of the time and expertise that they have to offer.

If you are interested in getting a referral, please talk to your provider at your next office visit.

**If you enjoyed this newsletter and would like to be placed on an electronic mailing list, email [ybrusuelas@nmbonecare.com](mailto:ybrusuelas@nmbonecare.com). The newsletter is produced on a quarterly basis.**

**Osteoporosis Foundation  
of New Mexico  
Educational  
Presentations**

**Manzano Mesa  
Multigenerational Center  
501 Elizabeth SE  
Albuquerque, NM 87123  
(505) 275-8731**

**1:30-3:00 PM**

**2011 Meetings:**

**February 10, 2011**

**Molly Grady**

**Topic: "The Benefits of Tai Chi Chih that relate to Osteoporosis and Balance"**

**May 12, 2011**

**Isabel Torres, RT**

**Topic: "Bone Density Testing-What to Expect"**

**August 11, 2011**

**E. Michael Lewiecki, MD**

**Topic: "New Treatments in Osteoporosis"**

**November 10, 2011**

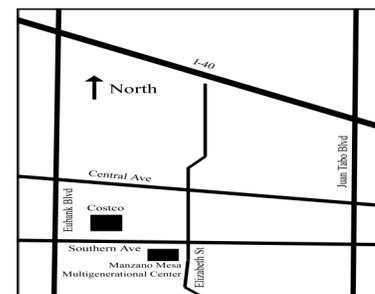
**George Fraser, Fifty n' Fit**

**Topic: "Smart Exercises for Osteoporosis"**

These meetings are open to the public. It is a great opportunity to talk to osteoporosis experts for as long as you want. There is limited space, so please sign up by calling 275-8731 in order to attend. A \$1 fee is collected in order to cover the cost of educational material.

Consider attending if:

- ❖ You have osteoporosis,
- ❖ You have a loved one with osteoporosis, or
- ❖ You are interested in learning more about osteoporosis.



**Ask Dr. Mike Lewiecki about . . . OSTEOPOROSIS**

**More on Vitamin D**

Dear Dr. Lewiecki- I have always taken good care of myself. I am very active. I take calcium and vitamin D. I don't smoke or drink too much. There is no osteoporosis in my family. Now my doctor tells me I have osteoporosis. How did this happen? I am only 58 years old.

*Jackie C., Los Alamos, NM.*

Dear Jackie - I hear stories similar to yours almost every day. Bone density is determined by two things- the peak bone mass (the best your bones ever get, usually when you are in your 20s) and the rate of bone loss after peak bone mass is attained. In a woman, the most dangerous time for losing bone is the first 3 to 5 years after menopause. The average rate of bone loss during this time is about 1.0 to 1.5% per year; however, some women are "rapid bone losers" who may lose as much as 3 to 5% per year. A rapid bone loser may go from having normal bones to osteoporosis in 5 years. If peak bone mass is

lower than average (usually due to genetic factors), then osteoporosis could develop even sooner. All of this can happen even when you take excellent care of yourself, but it is most likely to occur when you are estrogen deficient and have other risk factors for osteoporosis, such as a family history, low body weight, or take medicine that is harmful to bones (prednisone, for example).

The importance of osteoporosis is that it means your bones are weaker than normal and more likely to break in situations when normal bones would not. Although osteoporosis causes no symptoms unless there is a fracture, the consequences of a fracture may be severe, including pain, disability, and increased risk of death.

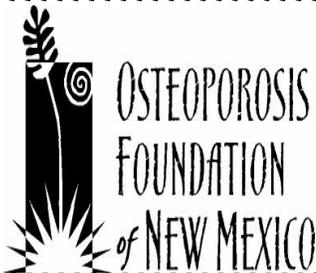
In your case, having osteoporosis at the age of 58, it would be wise to have a good medical evaluation for factors contributing to osteoporosis and to consider taking medication to strengthen your bones and make them less likely to break. The goal of therapy is to make your bones as strong as they can be and to make you as strong as you can be, so that you are less likely to fall. Many effective medications are now available for treating osteoporosis.

*Mike Lewiecki*

**FRAX**

A question that doctors have been asking for many years is, "How do I treat patients with osteopenia?" Osteopenia is a diagnostic term used to describe patients with bone density that is below the normal range but better than osteoporosis when measured with a DXA machine. In numbers, osteopenia means having a T-score between -1.0 and -2.5. The problem is that some patients with osteopenia have a high risk for fracture and should be treated with medications, while others have a low fracture risk and simply need to take care to have a healthy lifestyle and good nutrition. Until FRAX came along, we had no reliable way to tell a lone type of patient from the other.

FRAX is a computer program designed to estimate the 10-year probability of major osteoporotic fracture and hip fracture. The input for FRAX is age, sex, weight, height, a yes or no answer to 7 questions about "risk factors" for osteoporosis, and a bone density measurement, if available. When the 10-year probability of major osteoporotic fracture is 20% or more, or if the 10-year probability of hip fracture is 3% or more, it is recommended by the National Osteoporosis Foundation that treatment be started. FRAX may overestimate or underestimate fracture risk in some situations, so it is not always the final answer, but is a useful clinical tool to help physicians make difficult treatment decisions.



Support osteoporosis education in New Mexico. Help to reduce the burden of osteoporotic fractures. Osteoporosis Foundation of New Mexico is a local non-profit 501(c)(3) foundation. Consider a tax-deductible donation or bequest. Donations may be mailed to Osteoporosis Foundation of New Mexico at 300 Oak St. NE, Albuquerque, NM 87106. For more information, call Yvonne Brusuelas at 505-855-5627.