The Inside Scoop on Calcium
(Hint: Spot the word “scoop below” and win an extra copy of this newsletter to take home)

Most of us spend very little time thinking about our bones. We go about our busy lives working or thinking about other things that seem far more important. We expect our bones to quietly do their job of supporting our other organs, storing and maintaining the right amount of calcium, and allowing us to walk and be active. However, when a bone breaks, it immediately gets our attention. Those of us who have osteoporosis have fragile bones that may break under circumstances where a normal bone would not. Here are some tips for keeping your bones healthy if you don’t have osteoporosis, and for treating your osteoporosis if you already have it.

We lose calcium in urine, feces, and sweat. For healthy bones, we must at least replace what we are losing, or calcium will be taken away from our bones and they will become weaker and more likely to break. About 1200 mg of calcium per day is recommended for all adults. Since this includes what you get in your diet, you may not need any calcium supplements if you get a lot of dairy products. A quart of milk, for example, has all the calcium you need for the day. Thinking about ice cream in the hot summer months? A single scoop of ice cream (or an average container of yogurt) has about 300 mg, or about 25% of your daily requirement. However, the average American gets only about 600 mg per day in the diet. Therefore, if you are average in that respect, you need 600 mg per day as a calcium supplement in addition to the calcium you get in your diet. If you need more than 600 mg per day as a supplement, remember to split the doses so that you take no more than 600 at one time. You can only absorb that amount in a single dose and will just be wasting the extra amount if you take more.

What kind of calcium is best? There are many kinds and most of them are fine. Most people take calcium carbonate. What is important to remember is that this form of calcium is best taken with meals in order assure its absorption. If you prefer calcium on an empty stomach, take calcium citrate, which is absorbed fine with or without food. If you have had a kidney stone, you still need calcium. Try calcium citrate, since the citrate in it has an anti-stone forming effect for some people. Also, take it with the evening meal, as the calcium may reduce the absorption of oxalate, a component of many kidney stones.

Are the calcium pills too big? Try a chewable candy form of calcium or get liquid calcium. Calcium makes you constipated? Try calcium combined with magnesium.

And don’t forget vitamin D. Read the back page of this newsletter to find out more.
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, call the Research Dept. 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. If there is nothing for you now, there may be next time.

### IBS with Constipation

This is a randomized, placebo controlled study of an investigational medication to relieve the symptoms of Irritable Bowel Syndrome that is constipation predominant. You may qualify for this study if you are:
- Over the age of 18
- Have less than 3 bowel movements per week for at least the past month
- Have pain associated with your symptoms.

Forrest Lin-MD/31

### Osteoarthritis of the Hip

This is a randomized placebo controlled study of an investigational IV medication vs Naproxen for treatment of the symptoms of osteoarthritis of the knee. You may be eligible to participate if you are:
- Over the age of 18
- Have osteoarthritis of the knee
- Are able to take NSAIDs such as Aleve, Advil or Celebrex

Pfizer OA

### Osteoarthritis of the Knee

This is a randomized placebo controlled study of an investigational IV medication vs Naproxen for treatment of the symptoms of osteoarthritis of the knee. You may be eligible to participate if you are:
- Over the age of 18
- Have osteoarthritis pain in either the hip
- Unable to take NSAIDS or are getting inadequate relief from current NSAIDS (i.e. Ibuprofen, Celebrex or Naproxen), or are considering invasive treatments such as injections or replacement.

Pfizer OA

### Hypertension

This is a randomized, placebo controlled study of an investigational medication in combination with an approved medication for the treatment of hypertension. You may qualify for this study if you are:
- Over the ages of 18
- Have high blood pressure controlled with less than 3 medications
- Have no history in the past 6 months of heart attack or stroke.

Takeda 491

### Heartburn

This is a randomized, placebo controlled study of an investigational medication for Heartburn or Gerd. You may qualify for this study if you are:
- Over the ages of 18
- Take heartburn medication such as Prevacid or Nexium twice a day
- Have less than 1 episode of heartburn a week on your current medications

Takeda 178

All study-specific information is IRB approved. To learn more about any study, call (505) 923-3232.
Gout Prevention

A 4-month study to assess the prevention of gout flares when starting allopurinol therapy. You may be eligible to participate if you are:
- Between the ages of 18 and 80
- Have had 2 or more flares in the past 12 months and
- Are willing to start daily medication to prevent flares.

GSK Harmony

Gout Prevention

A six-month study to assess the prevention of gout flares when starting allopurinol or other urate lowering therapy. You may be eligible to participate if you are:
- Over the age of 18
- Are willing to start daily medication to prevent flares.

Regeneron 815

Gout Flare

An 4-week research study for an investigational medication for treatment of active gout flares. You may be eligible to participate if you are:
- Over the age of 18
- Currently experiencing a gout flare for less than 2 days.

Regeneron-814

Diabetes

A 3 and half year study of an investigational medication given once weekly to help control diabetes. You may be eligible to participate if you are:
- Between the ages of 18 and 80
- Have type 2 Diabetes and are currently taking Metformin alone or Metformin plus one additional medication for the past 3 months
- Are not currently well controlled.

GSK Harmony

Nocturia

A 12 week study to assess the safety and efficacy of an investigational inhaled medication for the treatment of frequent night time waking to urinate. You may be eligible to participate if you are:
- Between the ages of 50 and 80 and
- Have more than 2 episodes a night, at least 5 nights a week, for the past 6 months

Serenity

Why Should I Participate In A Clinical Trial?

As a volunteer in a clinical research trial you will not only take on an active role in your own health care but you will also:
- Participate in the development of medical therapies that may offer better treatments and cures for diseases.
- Gain access to new research treatments before they become publicly available in the marketplace.
- Receive closely monitored health care for your condition.
- May receive compensation for your time and travel expenses.

Whatever reason you chose to participate in clinical research, be assured that you are engaging in the advancement of medical treatments, therapies, and cures for chronic or life-threatening diseases.
Osteoporosis

A 48-week research study of oral calcitonin vs. inhaled calcitonin in postmenopausal women with osteoporosis. You may be eligible to participate if you:
- Are a postmenopausal woman over 45 years of age
- Have osteoporosis and currently not be taking any bone medications
- Not currently being treated with hormone replacement therapy.

**Unigene**

Osteoporosis

A clinical trial to assess the safety and efficacy of an investigational medication compared to already approved medications. You may be eligible to participate if you:
- Are a postmenopausal woman between 55 and 85
- Have osteoporosis
- Have not been treated with IV bone medications and have not taken oral bone medications in the past year.

**Amg785**

Osteoporosis

This is a 4-year study of an investigational medication vs. placebo in postmenopausal women with osteoporosis. You may qualify for this study if you are:
- Over age 65
- Have not broken a hip
- Have osteoporosis that is not currently being treated with mediations

**Merck -018**

Osteoporosis

This is a 12-month open-label, randomized research study to compare Forteo (a daily injection) with Reclast a once a year infusion and includes a bone biopsy procedure. You may be eligible to participate if you:
- Are a postmenopausal woman between 55 and 89
- Have osteoporosis
- Have not been treated with Forteo or Reclast and not taken any oral bone medication within the past 2 years.

**Lilly-SHOTZ**

Osteoporosis Prevention/Postmenopausal Symptoms

A 12-month study to assess the safety and efficacy of using a SERM with estrogen or alone in treating osteoporosis, postmenopausal hot flashes and endometrial hyperplasia. You may be eligible to participate if you are:
- Postmenopausal between 6 months and 5 years
- Do not yet have osteoporosis
- Are suffering from postmenopausal symptoms such as hot flashes, night sweats etc.

**Wyeth-3307**

Do you have heartburn related to Gastro-Esophageal Reflux Disease (GERD)?

Do you take medication twice a day for it?

We are participating in a research study that will help determine if an investigational medication can control your heartburn related to GERD.

If you have GERD related heartburn that is controlled by taking medication twice a day you may qualify for this study.

To learn more, call: 923-3232
to speak to our study specialists

If you qualify you will receive study care and study medication at no cost
Financial compensation for time and travel may be provided
EXTRA-EXTRA
READ ALL ABOUT IT

I am happy to announce that there is a supplemental article in “The Journal for Nurse Practitioners” entitled “Advances in the Treatment of Postmenopausal Osteoporosis” which I co-authored in collaboration with two other Nurse Practitioners. It was written specifically for use by other Nurse Practitioners as they endeavor to prevent and treat osteoporosis. It is a supplement to the June 2009 issue and you are welcome to read the article in the waiting room or in the exam rooms. If you would like to take a copy home to read, please ask for a Xeroxed copy.

If you enjoyed this newsletter and would like to be placed on an electronic mailing list, email ybrusuelas@nmbonecare.com. The newsletter is produced on a quarterly basis.
Ask Dr. Mike Lewiecki about . . . OSTEOPOROSIS

Dear Dr. Lewiecki– The more I hear about vitamin D, the more it sounds like a wonder drug. This is too good to be true, isn’t it? What is the real story with vitamin D, and how much do I need?

Susan R., Raton, NM.

Dear Susan – I would not call vitamin D a wonder drug, but it is certainly essential for healthy bones. We are also learning more and more about the role that vitamin D plays in other parts of the body.

Did you know that vitamin D is not really a vitamin? Most doctors would now classify it as a hormone- a chemical substance that is produced in one part of the body that circulates and affects cells or organs in other parts of the body. A vitamin, on the other hand, is a compound that our bodies require but cannot manufacture in sufficient quantity; therefore, a vitamin must come from food or a nutritional supplement.

Our skin produces vitamin D with exposure to sunlight and sends it to the liver to undergo some chemical alteration. It is then sent to the kidneys, where it is changed a bit more. The vitamin D helps us to absorb calcium that is needed by our bones, and also helps to regulate the growth and activity of many cells in other parts of the body. There is now evidence that vitamin D deficiency may result in an increased risk of many diseases, including cancer, diabetes, infectious diseases, and multiple sclerosis.

Unfortunately, vitamin D deficiency is very common. This may be because our bodies have evolved with organ systems adapted to a life of sun exposure that is far greater than what we typically get in modern society. It has been estimated that there are now about 1 billion people with inadequate vitamin D worldwide.

The only way to know for sure if you are getting enough vitamin D is to measure it in the blood. The recommended amount of vitamin D supplementation for adults is 800-1000 IU per day. Some may need more than that to achieve a desirable blood level. See the column to the right for more details on taking vitamin D.

Mike Lewiecki

VITAMIN D

Vitamin D, whether it is produced in your skin after exposure to the sun, contained in food that you eat, or taken as a supplement, is essential for healthy bones and important for many other organ systems. Since most of us are not in the sun enough to make all the vitamin D we need and there are very few food sources of vitamin D, supplements may be necessary.

Supplements come in two forms- vitamin D3, also called cholecalciferol, and vitamin D2, which is the same as ergocalciferol. D3 is from animal sources and D2 is from plants. Both of these work well, although there is some evidence to suggest that D3 may be a little more potent than D2. Recommendations for vitamin supplementation almost always assume that it is for D3. When buying vitamin D, read the label carefully to know which you are getting.

The National Osteoporosis Foundation recommends that adults take at least 800 IU per day, but many of us need 2000 IU or even more to get a desirable blood level of 30 ng/ml or above. Low vitamin D levels are a particular problem in the elderly, patients with gastric bypass surgery, celiac disease, and other diseases that result in poor intestinal absorption of nutrients. To learn more about vitamin D, talk to your doctor and see if you need further testing.