



Sustainable Health

By Judy Stone, CN, MSW

Thinning Facts, Thinning Bones

A friend recently asked me if she should take calcium as part of her daily regimen; she is small boned and has a family history of Osteoporosis. This question is one I hear often, and it's not one to which there is a simple yes or no answer despite the idea that has been emblazoned in our brains that we prevent bone loss by taking our daily calcium. This simplistic though not altogether unreasonable cause-effect link between the two is emblematic of "give me a symptom I'll give you a _____ (fill in, drug, supplement, herb, remedy)" thinking that plagues allopathic and often alternative medicine.

Most adults and many children know that calcium is needed to build bones. But so are protein, minerals, essential fatty acids, vitamin D, properly functioning digestion, good thyroid function, healthy adrenals, good acid-alkaline balance, and many other nutrients and physiological processes. So the answer to why your body may be losing bone, and why your friend's body may be losing bone, could be very different.

I loved Sally Fields as the flying nun. As a young girl I had an obsession with all things "nun" until I learned it wasn't a career path for a Jewish girl. But I have to take issue with her convincing direct-to-consumer pitch to American women to jump on the "convenient dosing of once a month Boniva" bandwagon. Don't you just love the voice-overs on the drug ads that speed talk you through all the toxic side effects? "Talk to your doctor if you experience pain or trouble swallowing, heartburn, ulcers in your stomach or esophagus, diarrhea, pain in extremities, or upset stomach. Do not take Boniva if you cannot sit or stand for 30-60 minutes". They *have* to talk fast to get it all in because the list is long and scary. Do you know why you have to be able to sit or stand for 30-60 minutes? Because the stuff is corrosive and has the potential of causing serious gastrointestinal damage so you don't want it sitting there on its way to your bone. And it's not just Boniva; Fosamax, Actonel and other drugs in the category called Bisphosphonates all have the same, potential, problematic side effects...

These drugs work by blocking cells in bone that would normally break down old bone cells, a natural part of bone turnover called bone resorption. They increase bone density by interfering with a normal body function, but they do not promote the other side of the equation, that is, they do nothing to stimulate the growth of healthy, new, strong bone cells. So they increase bone density by saving bone that was destined for the bone graveyard.

The selling of Osteoporosis drugs is a very interesting tale of the making of a disease to fit the prescription. Several months ago, NPR's *All Things Considered* did a riveting deconstruction of

"With any health issue, we are all vulnerable to feeling fearful and intimidated in the face of medical and pharmaceutical dogma. Armed with the facts, and some understanding of how our body works, we can become empowered to make better decisions that support our health."

this process (How a Bone Disease Grew to Fit the Prescription <http://www.npr.org/templates/story/story.php?storyId=121609815>). My summary will never do it justice and I hope since you are reading this article, you will also take the time to listen to the story as part of your medical empowerment. In short, around 1986, Merck, the maker of its now blockbuster drug Fosamax was at a loss to explain the drug's initial lackluster sales. Merck hired a hotshot consultant in the medical field, Jeremy Allen, to figure out why, and then to figure out how to goose sales. His analysis of the slow sales came down to the fact that not enough people were being screened for bone density, leaving doctors no reason to prescribe Fosamax. Screening machines, at the time, were large, expensive and not very common, leading to an access problem for patients.

Allen convinced Merck that it needed to establish a non-profit, named the Bone Measurement Institute. Through the BMI arm, Merck was ultimately able to promote its mission of diagnosing more women with the condition for which it had the "cure". Along the way, between Merck and the BMI, a company was started to develop smaller, cheaper, screening equipment, as was a financing company to get the machines in the office of doctors across the country (and make it profitable for them to screen). Congress was lobbied to pass laws that got Medicare to cover the screening. But the real coup was the redefining of Osteopenia, a term previously used to denote a natural, non-threatening, bone-thinning process. By printing the term, and graphing Osteopenia on the report printouts that doctors and patients got from the bone screening, both doctors and patients alike were subtly manipulated into thinking they needed to do 'something' about Osteopenia. And that 'something', was Fosamax.

1992, in Rome, a small gathering of Osteoporosis experts, organized by the World Health Organization met to come up with a clear marker for when the process of bone-thinning that naturally occurs in aging, should be considered a health risk, and termed Osteoporosis. According to the recollection of one participant at that meeting, Dr. Anna Totenson, the decision was made fairly arbitrarily. After the stake was plunked down delineating Osteoporosis, the members decided to give the name Osteopenia to the group that fell just before the Osteoporosis cutoff line. It was nobody's intention at that time to define a condition that required treatment; Osteopenia was more or less a category created for the convenience of researchers.

Bone Density, the measurement used to determine whether a woman (or man) is at a higher risk for bone fracture, has nothing to do with the quality and strength of the bone being measured. We want strong, flexible bone, not necessarily dense bone. Especially not when the density is created artificially by building up layers of "dead" bone.

Understanding this will hopefully arm you to make an informed decision if you find yourself confronted with the diagnosis of Osteopenia, as will many women in their 40's and beyond, if they have a bone density test. However, we still need to address the question of how do we continue to generate healthy strong bone as we (men and women) age? Really what we need to understand is how we get in the way of that process because the body knows how to build bone. Pretending it all comes down to having enough calcium, is a myth great for drug sales but not so good for us.

"Don't you just love the voice-overs on the drug ads that speed talk you through all the toxic side effects?"

Here are a few aspects of health and lifestyle to consider if you want to support healthy bone:

1. Stay active. Chop wood, carry water. Incorporate bending, lifting, walking, running, biking, digging, and all manner of movement into everyday life. It's what we're designed to do. If you have to go to a gym to do it, fine, but consider how you might enrich your daily life by incorporating weight-bearing exercise and breathing deeply into the life you already lead. Plant a garden, clean your garage, haul firewood, you get the picture. If you have pain or other limitations that keep you inactive, get the help you need to address the underlying problem, as is possible.
2. Make sure your digestion is healthy. This is the number one problem for which I see people. It is a multi-layered problem and can be simple or complex to remedy. But it *has* to be remedied; digestive and gastrointestinal issues are the underlying issues in almost all conditions of compromised health. Specific to bone health, a main concern is that the majority of people as they age make less stomach acid, usually as a consequence of poor diet and its impact on how well the body functions. Stomach acid is required to properly absorb adequate calcium and other nutrients. If you are on acid blocking medications you are increasing your risk for Osteoporosis as well as lots of other illnesses because of the impaired nutrient absorption. Those medications were developed and tested for 6-week use, not the years people stay on them. It is possible to wean off them but see someone who can help you repair your digestion, and handle the rebound reflux you will invariably experience if you go off them.
3. Have your Vitamin D level checked regularly with a 1-25 (OH) Vitamin D test. The RDA of 400 IU daily of Vitamin D is not enough for most people in our latitude to keep levels sufficiently high for bone growth. D is also important for cancer prevention, depression treatment, and immune health. Practitioners vary in the reference ranges used but a minimum of 40 ng/ml is what many functional nutrition / medicine practitioners suggest. It is safe to supplement with 2-10,000 IU's daily in most cases, depending on your starting level, but it is important to monitor your levels so you do not get too much Vitamin D, which would then pull calcium out of your bones. The upper range can vary depending on your health needs, but 40-80 ng/ml wouldn't be too much for most adults.

With any health issue, we are all vulnerable to feeling fearful and intimidated in the face of medical and pharmaceutical dogma. Armed with the facts, and some understanding of how our body works, we can become empowered to make better decisions that support our health.

###

