The "Calcium Lie" Every Woman Should Know About

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Osteoporosis is a disease characterized by porous and fragile bones. It affects 44 million Americans, striking 1 in 3 women, and 1 in 5 men. Those with osteoporosis are at increased risk of height loss, fractures of the hips, wrists and vertebrae, and chronic pain.

If you've been led to believe that the key to preventing osteoporosis is increasing your calcium intake and starting on a regimen of pharmaceutical drugs, you're not alone.

I'm here to lead you past all of the confusing and conflicting information about osteoporosis and down a safer, more effective road to preventing bone loss and osteoporosis.

Read on to learn the truth about osteoporosis and calcium deficiency, what vitamins can make a real difference, and the surprising connection between bone loss and Alzheimer's disease.

The Truth about Osteoporosis and Calcium Deficiency

I'm sure you've heard that the cause of osteoporosis and the key to its prevention revolve around calcium, right?

Unfortunately, nothing could be further from the truth.

Dr. Robert Thompson, M.D., wrote an entire book on this subject called, The Calcium Lie, which explains that bone is comprised of at least a dozen minerals and the exclusive focus on calcium supplementation is likely to worsen bone density and increase your risk of developing osteoporosis!

As mentioned in this previous article, Dr. Thompson recommends the use of unprocessed salt as a far healthier alternative to calcium supplementation.
I recommend using Himalayan salt as it is an excellent way to feed your body the trace minerals it needs to function optimally.

Why Sally Field Could be Setting Herself Up for Osteoporosis with Boniva

If you've been prescribed an osteoporosis drug such as Fosamax, Actonel or Boniva, it is very important that you understand how these drugs work before putting them into your body.

Web MD describes biphosphonate drugs as:

"...antiresorptive medicines, which means they slow or stop the natural process that dissolves bone tissue, resulting in maintained or increased bone density and strength."

I'm sorry to say, you're only getting half the story here. Using these types of pharmaceutical drugs is the worst way to attempt to treat or prevent osteoporosis and I'll tell you why.

Even though they will increase your bone density, these drugs are poison!

They work by killing off certain cells in your bones called osteoclasts. Osteoclasts destroy the bone as part of the natural bone regeneration process. Killing off these cells means you are left with only osteoblasts, which will increase bone density but not bone strength.

As a result, your bones lose their natural ability to build new bone and readjust to the constantly changing forces applied.

Now you have thicker bones with less strength, which actually increases your risk of bone fractures. Additionally, these drugs have been linked to some terrible side effects, including increased risk of ulcers and:

- **Eye problems** such as blurry vision, pain and swelling
- **Thigh bone fractures** and osteonecrosis of the jaw
- **Liver damage** and renal (kidney) failure
- **Atrial fibrillation**
- **Esophageal cancer**
- **Hypocalcemia** (blood calcium levels are too low)

Another disturbing fact?
Fosomax is in the same chemical class (phosphonate) as the soap scum cleaner you use in your bathroom! I'm sorry to say, it isn't surprising that the pharmaceutical companies have never put that little tidbit of information on your prescription drug label.

**Steer Clear of Steroids**

According to a study done at Washington University School of Medicine in St. Louis, there is a strong link between osteoporosis and the use of steroids:

"High-dose cortisone is the second most common cause of osteoporosis, and we currently have no real treatment for this serious side effect," says senior author Steven L. Teitelbaum, M.D., Messing Professor of Pathology and Immunology.

"Given how frequently these drugs are used to treat many different conditions, that's a major clinical problem."

The conclusion of the study revealed that although the steroid cortisone appears to inhibit the ability of osteoclasts to dismantle old bones in genetically normal mice, the inability of the skeletal structure to renew itself may cause bones to weaken dramatically from aging and stress.

If you suffer from an autoimmune disease such as rheumatoid arthritis, asthma, multiple sclerosis or chronic obstructive pulmonary disease, click on the links above for natural alternatives for healing.

On the other hand there is one steroid hormone that will likely help build bone and that is progesterone. Many pre and post menopausal women are deficient in this important hormone.

**Gluten Intolerance and Bone Loss**

Is your stomach often upset?

Chronic gas, nausea, bloating, diarrhea, constipation and brain fog could all be signs of an undiagnosed gluten intolerance.

Gluten is a protein found in grains such as wheat, rye and barley. According to statistics from the University of Chicago Celiac Disease Center, an average of one out of every 133 otherwise healthy people in the United States suffer from celiac disease (CD) but previous studies have found this number could be as high as 1 in 33 in at-risk populations.

Those with undiagnosed gluten intolerance often have malabsorption of nutrients due to chronic intestinal damage. This means that your body is unable to optimally take nutrients from food and distribute them throughout your body.
This malabsorption of nutrients can lead to osteoporosis.

If you often experience the above-mentioned symptoms, a gluten free diet may be the key you need to experience great health, perhaps for the first time in your life.

My book, *The No Grain Diet*, explains, in detail, the damaging health effects of sugars and grains, even to those who do not have a gluten intolerance.

**Other Foods that Lead to Bone Loss**

Processed and fast foods are the worst stuff you can put into your body. In order for your body to function optimally, it needs the type of balanced diet that I suggest in the next section.

Processed foods such as potato chips, french fries, microwaveable "meals", soda and candy contain very little nutrients and are chock full of undigestible fats and dangerous additives such as high fructose corn syrup, aspartame and preservatives.

If you think switching from a mainly processed food diet to a healthy, nutritious one will be next to impossible, I'm here to tell you it's easier than you think.

When cooking, I advise you to avoid most all omega-6 based oils such as corn, safflower or soy oil. These oils are loaded with highly processed, damaged omega 6 fats, which contribute to inflammation in your body.

Instead, I recommend using healthful olive- and coconut oils. For more information, see my video on the health benefits of these oils.

**Foods that Prevent Bone Loss**

I recommend eating a wide variety of organic, preferably locally grown vegetables to get a proper balance of essential vitamins and minerals into your body. An easy way to increase the amount of vegetables in your diet is vegetable juicing.

It is a highly effective way to obtain the most potent nutrition and it's easy for your body to digest and absorb.

One important food that has been shown to help decrease bone loss and osteoporosis is onions.

**Prevent Bone Loss with Appropriate Sunshine Exposure**
The health benefits of vitamin D cannot be overstressed. An alarming number of people in the United States are vitamin D deficient, and vitamin D deficiency can lead to a host of health problems, including osteoporosis.

Despite what you may have heard, appropriate sunshine exposure is not bad for you. It is healthy and necessary. Just 15 to 20 minutes of sun exposure per day can make a dramatic improvement in your health, and appropriate sun exposure is the ideal way to maintain your vitamin D levels in the optimal range. Alternatively, you can use a safe tanning bed.

However, if neither of those options are available to you, the next option is to take an oral vitamin D3 supplement. Typical adult doses for vitamin D range from 5 to 10,000 units per day.

Keep in mind that it is very important to get your vitamin D levels checked by a qualified lab (I recommend LabCorp) to avoid under- or overdosing.

An optimal blood level of vitamin D for a healthy adult is between 50-70 ng/ml.

The Importance of Omega-3 for Strong, Healthy Bones

Omega 3 is another essential nutrient your body needs in order to prevent both physical and mental illness, inflammation and osteoporosis. As I mentioned in a previous article, The British Journal of Nutrition recently published a study stating that the Omega fat, DHA appears to constitute marrow and enhance bone mineral content.

Unfortunately, omega-3 deficiency is on the rise and has been revealed as the sixth biggest killer of Americans. It has been reported to increase risk of death from ALL causes and accelerate cognitive decline.

While plant-based omega-3 fats such as those found in flax seed are highly beneficial, on account of their high alpha-linolenic acid (ALA) content, animal-based omega-3 fats contain two crucial ingredients you are not getting from plants: docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA).

Ideally, you would receive all the animal based omega-3's you would need from eating sea food. Unfortunately, industrial pollution has changed the landscape, turning most of the world's waters more or less toxic. Fish are now loaded with mercury, industrial toxins, PCBs and PDEs. The same goes for most of the oil that is made from these fish.

Thankfully, there is a sustainable source of animal-based omega-3 fats available, namely krill oil. Krill are very tiny shrimp-like creatures that exceed the number of all animals (including humans) in the world! Krill oil is also more readily absorbed than fish oil because krill fat is attached to phosphates. This means you need far less krill oil than you would fish.
Another bonus?

Krill oil contains antioxidants called astaxanthin that protect DHA and EPA fats until they are consumed.

These factors make krill oil the optimal choice to meet your omega-3 needs.

**Vitamin K2 is CRUCIAL in Preventing Osteoporosis**

Vitamin K can be classified as either K1 or K2:

1. **Vitamin K1**: Found in green vegetables, K1 goes directly to your liver and helps you maintain a healthy blood clotting system. (This is the kind of K that infants need to help prevent a serious bleeding disorder.) It is also vitamin K1 that keeps your own blood vessels from calcifying, and helps your bones retain calcium and develop the right crystalline structure.

2. **Vitamin K2**: Bacteria produce this type of vitamin K. It is present in high quantities in your gut, but unfortunately is not absorbed from there and passes out in your stool. K2 goes straight to vessel walls, bones, and tissues other than your liver. It is present in fermented foods, particularly cheese and the Japanese food natto, which is by far the richest source of K2.

Vitamin K2 can convert to K1 in your body, but there are some problems with this, which I will discuss shortly. As a supplement, K1 is less expensive, which is why it's the form used for neonates.

Making matters even more complex, there are several different forms of vitamin K2.

MK8 and MK9 come primarily from dairy products. MK4 and MK7 are the two most significant forms of K2, and act very differently in your body:

- **MK4** is a synthetic product, very similar to vitamin K1, and your body is capable of converting K1 into MK4. However, MK4 has a very short half-life of about one hour, making it a poor candidate as a dietary supplement. After reaching your intestines, it remains mostly in your liver, where it is useful in synthesizing blood-clotting factors.

- **MK7** is a newer agent with more practical applications because it stays in your body longer; its half-life is three days, meaning you have a much better chance of building up a consistent blood level, compared to MK4 or K1.

MK7 is extracted from the Japanese fermented soy product called natto. You could actually get loads of MK7 from consuming natto as it is relatively inexpensive, and is
available in most Asian food markets. Few people, however, care for it's smell and slimy texture and find it difficult to tolerate.

The evidence suggests that vitamin K2 is essential for your bone health, but it is a nutrient the vast majority of you do not get in adequate amounts from your diet.

How does vitamin K lead to bone health?

Osteocalcin is a protein produced by your osteoblasts (cells responsible for bone formation), and is utilized within the bone as an integral part of the bone-forming process. However, osteocalcin must be "carboxylated" before it can be effective. Vitamin K functions as a cofactor for the enzyme that catalyzes the carboxylation of osteocalcin.

Vitamin K2 has been found to be a far more effective "activator" of osteocalcin than K1.

There has been some remarkable research about the protective effects of vitamin K2 against osteoporosis:

• A number of Japanese trials have shown that vitamin K2 completely reverses bone loss and in some cases even increases bone mass in people with osteoporosis.

• The pooled evidence of seven Japanese trials show that vitamin K2 supplementation produces a 60 percent reduction in vertebral fractures and an 80 percent reduction in hip and other non-vertebral fractures.

• Researchers in the Netherlands showed that vitamin K2 is three times more effective than vitamin K1 in raising osteocalcin, which controls the building of bone.

Although your body can convert K1 into K2, studies show that the amount of K2 produced by this process alone is insufficient. Even if you are consuming enough K1, your body uses most of it to make clotting factors, leaving little remaining for your bones.

In other words, your liver preferentially uses vitamin K1 to activate clotting factors, while most of your other tissues preferentially use K2.

Vitamin K2 has also been found to offer you other benefits—besides your bones!

Vitamin K2 is the biological glue that plugs calcium into your bone matrix. Dietary sources of K2 can be found in traditionally fermented foods such as tempeh, miso, natto and soy sauce.

Are You Getting Enough Vitamin K from Your Diet?
Eating lots of green vegetables will increase your vitamin K1 levels naturally, especially:

- Kale
- Spinach
- Collard greens
- Broccoli
- Brussels sprouts

You can obtain all the K2 you'll need (about 200 micrograms) by eating 15 grams of natto daily, which is half an ounce. However, natto is generally not pleasing to the Westerner’s palate, so the next best thing is a vitamin K2 supplement.

But remember, you must always take your vitamin K supplement with fat since it is fat-soluble and won’t be absorbed without it.

Although the exact dosing is yet to be determined, Dr. Vermeer recommends between 45 mcg and 185 mcg daily for adults. You must use caution on the higher doses if you take anticoagulants, but if you are generally healthy and not on these types of medications, I suggest 150 mcg daily.

Fortunately, you don't need to worry about overdosing on K2—people have been given a thousand-fold "overdose" over the course of three years, showing no adverse reactions (i.e., no increased clotting tendencies).

**Exercise to Prevent Bone Loss**

Remember that bone is *living tissue* that requires regular physical activity in order to renew and rebuild itself.

Peak bone mass is achieved in adulthood and then begins a slow decline. Exercise is very important in maintaining healthy bone mass. Weight-bearing exercise is one of the most effective remedies against osteoporosis. The last thing you want to consider is to take a drug to improve your bone density, as without question, that is more likely to cause long-term harm than benefit.

Your bones are actually very porous and soft, and as you get older, your bones can easily become less dense and hence, more brittle. Especially if you are inactive.
Resistance training can combat this effect because as you put more tension on your muscles it puts more pressure on your bones, which then respond by continuously creating fresh, new bone.

In addition, as you build more muscle, and make the muscle that you already have stronger, you also put more **constant pressure** on your bones.

A good weight bearing exercise to incorporate into your routine (depending on your current level of fitness, of course) is a walking lunge, as it helps build bone density in your hips, even without any additional weights. However there is newer technology as discussed below that may even be better.

**Discover Acceleration Training**

Acceleration training exercise is based on Rhythmic Neuromuscular Stimulation (RNS) dating back to the 1960s when Professor W. Biermann, from the former East German Republic, described 'cyclical vibrations' capable of improving the condition of your joints relatively quickly.

As the theories of acceleration training exercise developed, Russian ballet dancers with minor muscle injuries such as Achilles tendonitis discovered that vibration aided the healing process. They also found that their muscular strength and jump height increased with only a quarter of the effort or time required by traditional training methods.

Since then many athletes have discovered the benefits of acceleration training exercise.

These results can be achieved now by using the 'Power Plate', which combines a series of exercises and stretches with cyclical vibrations designed to prevent mineral bone loss by adding mechanical load to the bone via the muscle and tendons.

**Osteoporosis in Men**

Here is something about osteoporosis in men you may not have realized: Men over the age of 50 are at greater risk for developing osteoporosis than prostate cancer. Men develop this disease because of a condition called hypogonadism, which may lead to shrinking by several inches. Risk factors in men include:

- Alcoholism
- Obesity
- Smoking
Men with pre-existing conditions such as asthma, emphysema, Crohn's disease, herniated disks, and autoimmune disease taking steroids such as prednisone or cortisone are increasing their risk of developing osteoporosis that much further.

**The Surprising Link Between Alzheimer's Disease and Bone Loss**

As I mentioned in a previous article, low bone mass has a surprising connection to Alzheimer's disease.

In the study, researchers recorded bone mass measurements for 987 men and women with an average age of 76 years. They then followed them for up to 13 years and tracked who developed Alzheimer's or dementia.

Results showed that women with the lowest bone mass measurements were more than twice as likely to develop Alzheimer's or dementia as women with stronger bones.

If a woman of 70 years of age has lower bone mass, it means her exposure to estrogen may not have been as high as it should. Therefore, it seems estrogen loss plays a critical role in the development of osteoporosis as well as Alzheimer's disease.

**It’s Far Easier to Prevent Bone Loss than to Treat It**

It's true what Benjamin Franklin said, "An ounce of prevention is worth a pound of cure." Now that you're armed with the knowledge you need to make informed decisions about the prevention and healing of osteoporosis, you're ready to take control of your health!

Make sure to ask your WellnessOne Doctor or Receptionist about supplements such as Vitamin D3 and Omega 3 to keep your bones healthy.