

NUTRI-SPEC



THROUGH
SPECIFIC NUTRITION
89 Swamp Road
Mifflintown, PA 17059
800-736-4320
717-436-8988
Fax: 717-436-8551
nutrispec@embarqmail.com
www.nutri-spec.net

THE NUTRI-SPEC LETTER

Volume 20 Number 7

From:
Guy R. Schenker, D.C.
July, 2009

Dear Doctor,

Our last several Letters taught you all you need to know about nutrition for pregnant and lactating women and their babies. Let us now consider ...

WOMEN AT THE OTHER END OF THE REPRODUCTIVE SPECTRUM.

What is the number one nutrition concern among women who have reached menopause?

OSTEOPOROSIS.

As a clinical nutritionist, you must understand a few little-known facts about osteoporosis. The truth is, typical nutritionists are not helping their osteoporosis patients at all --- even while ...

THROWING TONS OF CALCIUM AT THEIR BONES.

The sad reality is that millions of patients are swallowing billions of calcium tablets, the calcium from which largely ends up being ...

FLUSHED DOWN THE TOILET.

Precious little of this calcium ever finds its way into osteoporotic bone.

If you want to really help your osteoporosis patients (instead of asking them to throw their money away on useless calcium pills), then you must rid yourself of the misconceptions held by virtually all nutritionists, and learn these facts:

- 1) Osteoporosis has almost nothing to do with a deficiency of calcium.
- 2) There are several other minerals and trace minerals that are as important as calcium in reversing osteoporosis.
- 3) Osteoporosis has very little to do with menopause, and has virtually nothing to do with low estrogen levels.
- 4) There are two common components of a typical diet that greatly accelerate bone loss.
- 5) Exercise is crucial to maintaining bone mass, but the exercises typically prescribed for osteoporosis can make the problem worse.
- 6) Natural light is as important as any nutrient to maintain bone mass. Vitamin D is the one supplement all osteoporotic patients need.

You need to get a clear mental picture of what osteoporosis is -- and what it is not. Osteoporosis is not a deficiency of calcium in the bone. There is a condition in which the bone structure is intact but there is just a deficiency of calcium -- this condition is called osteomalacia, a complex pathology with more than 30 causes, all of which involve problems with either vitamin D metabolism or phosphorous metabolism. Osteopenia, a term you will hear more often than osteomalacia, is a subnormal bone density seen on a radiograph that can have many causes, but 95% of the time is merely osteoporosis not yet developed sufficiently to meet the official definition of osteoporosis. Osteopenia is defined (for the benefit of drug companies that sell drugs treating bone loss) as 40% of the decrease in bone density required to be considered osteoporosis. This arbitrary definition substantially multiplies the market for bone density drugs.

True osteoporosis, on the other hand, is a breakdown in the matrix of the bone. The matrix is the fibrous protein backbone upon which mineralization occurs in osseous tissue. Have you ever been on a construction site when they were pouring a concrete slab for a floor or a sidewalk? Do you remember seeing the metal rods or mesh onto which they poured the concrete? If we make an analogy between a sidewalk and bone, you can think of the concrete as the minerals of the bone and the reinforcing rods as the bone matrix. What would happen to that sidewalk if they poured the concrete without reinforcing rods? In no time the concrete would crumble and fall apart. What happens to an osteoporotic bone? With the deterioration of the fibrous protein matrix the minerals cannot be held. The bone gradually loses mineral density over time.

What happens when your osteoporosis patients take the calcium supplements uninformed nutritionists sell them? Mostly nothing. If the

fibrous tissue of the bone could not hold the calcium it already had, neither can it hold the calcium supplement. The truth is that osteoporosis does involve calcium, but no more than it involves any of the other minerals and trace minerals required for bone formation --- including silica, magnesium, zinc, manganese, copper, selenium, iodine, boron, and phosphorus. Each of these minerals is, qualitatively speaking, every bit as important as calcium in bone formation. Some very interesting studies show that supplementing with trace minerals with no additional calcium cuts the amount of bone loss in half in osteoporosis patients. (1,2)

In fact, calcium is not the most important nutrition consideration regarding maintenance of bone density. The effects of trace mineral deficiencies on bone loss are rarely appreciated. One of the excellent studies just cited looked at post menopausal women and supplemented an experimental group with the trace minerals zinc, manganese, and copper. Compared to the control group, this group had almost a 50% reduction in bone loss. Supplementing another experimental group with ...

CALCIUM DID NOT SIGNIFICANTLY IMPROVE BONE DENSITY ...

over the group that received trace mineral supplementation alone. When another experimental group was given both the trace minerals and calcium there was actually an increase in bone density. Keep in mind that this study of trace minerals used only copper, manganese, and zinc, while magnesium, silica, selenium, and iodine are also vitally important for osteoblastic activity.

Another important point relating to calcium and bone mineralization is that when an osteoporotic patient takes excess calcium it actually inhibits osteoblastic activity. (3) The adverse effect of calcium supplementation on bone mineralization is particularly evident in patients deficient in magnesium. (4) This calcium and magnesium antagonism is a perfect example of the NUTRI-SPEC fundamental concept of metabolic balance. You, as a NUTRI-SPEC practitioner, are uniquely aware of the potentially damaging effects of essential nutrients when they are ingested in disproportion to other essential nutrients. We all need calcium as a critical component of our individualized nutrition plan. How much calcium? Only NUTRI-SPEC can answer that question. The specific need varies tremendously from one person to another --- depending on what metabolic imbalances might be influencing calcium metabolism.

So, when these scientific studies show that calcium supplementation can actually interfere with bone mineralization, and does so by blocking the activity of magnesium and silica and other minerals required for strong bone, we see affirmation that ...

**METABOLIC BALANCING WITH NUTRI-SPEC IS THE ONLY
COMPREHENSIVE APPROACH TO OUR OSTEOPOROSIS PATIENTS.**

There are several metabolic imbalances that cause aberrant calcium utilization. In the presence of these imbalances, calcium supplementation will:

- fail to improve bone mass, and,
- exacerbate those metabolic imbalances ...

thus devastating the victim of unscientific nutrition.

In patients with a tendency toward an ALKALOSIS METABOLIC IMBALANCE, excess calcium will be deposited not in bone, but in soft tissues. Exacerbation of arthritis, spurs, nervous twitches, muscle cramps, and insomnia are the consequences of such injudicious calcium administration. In these patients with an ALKALINE IMBALANCE, the calcium (and to a certain extent, magnesium and potassium) circulating in the blood is excessively bound to albumin. There is very little free/ionic calcium, the active form of the nutrient, available to infiltrate cell membranes as needed.

That is why an ALKALINE IMBALANCE is characterized by nerve hypersensitivity, insomnia, and cramps. Any calcium supplement given to an alkalosis patient cannot be held in solution, and precipitates out of body fluids, thus contributing to spurs, arthritis, cysts, and kidney stones. It is common for your alkalosis patients to suffer calcium deficiency symptoms even while their bodies are full of calcium. Supplementing with Phos Drops or hydrochloric acid, with no calcium supplementation, will free the calcium bound to albumin, and, begin to (gradually) break up the soft tissue calcium deposits. [Under no circumstances should your patients with an ALKALINE IMBALANCE take alkaline calcium compounds such as calcium carbonate, citrate, or lactate, or calcium-containing anti-acids such as Tums.]

For patients with a SYMPATHETIC METABOLIC IMBALANCE, the huge calcium intake recommended by the “experts” will potentiate the effects of the patients’ already elevated catecholamine stress hormone activity. Calcium in this circumstance will exacerbate hypertension, insomnia, stress, erectile dysfunction, tachycardia, and constipation. So strong is the catecholamine push from calcium that your SYMPATHETIC IMBALANCE patients will be the quickest to react negatively to calcium supplements. Rarely, however, are the dry mouth, cold hands, and heart palpitations blamed on the inappropriate supplementation. You will note that there is zero calcium in the Complex S you give your sympathetic

patients. They desperately need the magnesium, potassium, and niacin to specifically oppose the harm done by calcium.

In patients who have a KETOGENIC METABOLIC IMBALANCE, too much calcium will inhibit efficient use of glucose for oxidative energy production. Fatigue, depression, and a drop in body temperature are typical. In many of your ketogenic patients, calcium supplementation will exacerbate high blood pressure. Insulin resistance is common among patients with a KETOGENIC IMBALANCE, and calcium will drive up the blood sugar. You can understand why there is no calcium in Oxygenic K.

When there is a DYSAEROBIC METABOLIC IMBALANCE, swallowing the recommended daily intake of calcium will accelerate the aging process by increasing catabolic activity in the skin (wrinkles and age spots), and in the brain (excitotoxic oxidative damage). Calcium will drive potassium out of the cells of your dysaerobic patients, leaving them susceptible to many pathological processes. If the excess calcium is accompanied by a diet high in omega 6 and omega 3 fatty acids, there is an increased susceptibility to autoimmune diseases. Atherosclerosis, you may know, used to be called arteriosclerosis --- hardening of the arteries --- the result of calcium plus dysaerobic oxidative damage to the arterial endothelium.

Do you want to supplement your dysaerobic patients with calcium? Certainly not. Just as with Complex S and Oxy K, there is no calcium in Oxygenic D (but plenty in Oxy A, Complex P, and Oxy G). Tell all your dysaerobic, ketogenic, and sympathetic patients who want to supplement with calcium (whether for osteoporosis or some other inane health food industry disease-specific reason), "Calcium just makes you OLD."

1. Saltman, et al. The role of trace minerals in osteoporosis. J Am Coll Nutr. 1993.
2. Stranese, et al. Spinal bone loss in postmenopausal women supplemented with calcium and trace minerals. J Nutr. 1994.
3. Carlisle, E. A skeletal alteration associated with silicon deficiency. Federal Proceedings. 399-404, 1962.
4. Abraham and Grewal. A total dietary program emphasizing magnesium instead of calcium. Effect on the mineral density of calcaneus bone in post menopausal women on hormonal therapy. J Reprod Med. 1990, May; 35(5):503-7.

Understanding the truth about the potential damage done by calcium supplements certainly makes them far less desirable, and, raises serious ...

DOUBTS ABOUT THE COMPETENCE OF THE CALCIUM PILL PEDDLERS.

Are you beginning to realize that you need a little more than a calcium supplement to help your osteoporosis patients? What you need is an objective testing system to determine exactly what trace minerals and minerals a particular osteoporosis patient needs to restore bone matrix. In particular, you must define not only exactly how much calcium a person needs but exactly what form of calcium supplement is ideal (and which form of calcium supplement could be harmful) for each of your patients. Vitamin D supplementation is always essential, but even the quantity of vitamin D needed in each case must be determined by metabolic testing.

Should you ever give extra calcium as an adjunct to NUTRI-SPEC supplements? Rarely. Your anaerobic, glucogenic, electrolyte insufficient, and parasympathetic patients will usually obtain all the calcium they need as long as they are on Oxy A, Oxy G, Formula EI, or Complex P. Patients with a Dysaerobic Imbalance, Ketogenic Imbalance, Electrolyte Stress Imbalance, or Sympathetic Imbalance should never supplement with calcium until the test pattern for their imbalance has been broken. Then, rarely, a little calcium beyond what is in Oxy B may be beneficial.

When, why, and how to supplement with calcium and vitamin D, along with an explanation of calcium (and other mineral) absorption and utilization will be covered in next month's Letter. [PREVIEW: a) The only calcium supplements you should ever consider are bone meal, calcium glycerophosphate, calcium aspartate, and calcium orotate. b) osteoporosis drugs make bones brittle, and actually increase the incidence of fractures after 6 years.] In the meantime, get your patients off their silly calcium pills.

CALCIUM JUST MAKES YOU OLD.

Guy R. Schenker, D.C.