

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 11

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

Dear Doctor,

DO YOUR PATIENTS THINK YOU ARE CRAZY?

Many of mine think I am a raving lunatic --- at least at first. --- And I wouldn't have it any other way. You see, the only way to shake people free of the myths they cherish is by ...

MAKING THEIR HEADS SPIN SO FAST ...

their brains lose their grip on all the false beliefs they cling to. And the only way to get those cerebral cortices whirling with enough velocity to eject goofy dogma is to ...

APPEAR SO NUTTY ...

that your patients' neurons fly into a tizzy decrying your insanity.

GET THEIR ATTENTION!!

Get their minds spinning so wildly their hearts get pulled along for the ride. Then, and only then, are they open to receiving TRUTH.

To illustrate: You have been advised repeatedly in our several month presentation on osteoporosis to tell your patients,

**“CALCIUM SUPPLEMENTS JUST MAKE YOU
OLD.”**

How many times have you spoken those words?

To male patients who inform me they are on calcium, I make that statement all the time. To females, I am more likely to growl (good naturedly),

“ALL THAT WILL DO IS MAKE YOUR BONES WEAK.”

Patient response? In the more timid, the mouth drops open as the desperate eyes jump to the security of my CA, as if to say, “You work for this nut --- am I safe?!”

The more vocal exclaim, “Huh?! --- You’re joking!”

The assertive blast me with, “No way! --- You’re crazy!!”

In all cases, the stage is set --- for my song and dance about calcium, osteoporosis, metabolic balance, biologically active nutrients, antagonism between nutrients, charlatans in the health food and pharmaceutical industries ... And before you know it, the patient’s mind spins those nasty globs of indoctrination SPLAT! against the wall --- while eagerly absorbing the TRUTH, once and forever.

So, here are your headliners regarding calcium and osteoporosis:

“CALCIUM JUST MAKES YOU OLD.”

**“OSTEOPOROSIS HAS ALMOST NOTHING TO DO
WITH A CALCIUM DEFICIENCY.”**

“TAKING CALCIUM CAN MAKE YOUR BONES WEAKER.”

**“NINETY PERCENT OF THE CALCIUM YOU ARE TAKING
GOES STRAIGHT INTO THE TOILET.”**

“OSTEOPOROSIS HAS NOTHING TO DO WITH MENOPAUSE.”

**“ESTROGEN CAN ACTUALLY WEAKEN YOUR BONES ---
WHILE IT CAUSES ALL SORTS OF NASTY SIDE EFFECTS,
INCLUDING CANCER.”**

**“DO YOU KNOW WHEN YOUR OSTEOPOROSIS STARTED?
--- IT STARTED WHEN YOU WERE 23.”**

**“CALCIUM IS A DANGEROUS DRUG THAT CAUSES
AT LEAST 24 TERRIBLE SIDE EFFECTS.”**

From the last four issues of this Letter you have learned all you need to back up those attention-grabbing headlines. Your presentation of TRUTH --- the facts your patients suddenly realize they would have discovered nowhere but in your office --- will win their confidence forever. In your presentation, assure them with, "I am not making all this up --- it comes from the scientific literature --- scientific research that the health food and pharmaceutical industries choose to ignore. If you are interested, I can give you some information to read that gives the whole story on osteoporosis and the problems with calcium supplements." --- Offer them this series of 5 NUTRI-SPEC Letters.

The concept of nutrient antagonism --- how one nutrient, if taken in excess, can block the absorption or utilization of other nutrients --- is one on which I love to elaborate. The idea of nutrient balance is a perfect lead-in to the concept of Metabolic Balance. For my calcium worshipping, osteoporosis-phobic patients I tell the story of osteoporosis in Finland and The Netherlands ...

Finland and The Netherlands are among the countries with the highest calcium intake in the world. So --- if we believe in the calcium prevents osteoporosis myth, we would expect these countries to have an extraordinarily low incidence of osteoporosis. Yet the rate of osteoporosis in Finland and The Netherlands is the very highest in the world. Why? Difficulty obtaining adequate vitamin D in sun deficient northern countries compounds the problem, but the primary reason for poor bone density is that the calcium to magnesium ratio of the diet, 4 to 1, is so high.

The magnesium intake is actually not bad, but the calcium is high enough to block magnesium absorption to a degree, then, to prevent the incorporation of magnesium into bone. You have several references on the importance of magnesium in preventing and treating osteoporosis, but here is the essential TRUTH ... Fifty percent of the magnesium in the human body is in bone. Deficient bone magnesium does not decrease bone density --- but --- causes poor trabecular integrity, thus resulting in brittle, easily fractured bones. The more calcium the Fins and Dutch eat, the more magnesium and other minerals are driven away from bone --- and the more susceptible they are to broken femoral necks and vertebral compression fractures.

TAKING CALCIUM CAN MAKE YOUR BONES WEAKER.

**NUTRIENT BALANCE --- METABOLIC BALANCE ---
IS THE KEY TO STRONG BONES.**

The only osteoporosis myth as nearly pervasive as the need for damaging megadoses of calcium is the “estrogen will protect your bones” propaganda. We spent much of last month’s Letter exposing the purported association between menopausal estrogen decrease and osteoporosis as entirely fraudulent.

You learned that the honest research actually shows loss of bone density in response to estrogen. You learned the history of how the estrogen industry contrived the “science” behind the its estrogen sales pitch. You learned how improved DEXA bone mass readings after hormone replacement therapy are false. And, you learned that while estrogen does nothing to strengthen bone, there are hormones essential in preventing/treating osteoporosis, including vitamin D (a hormone), testosterone, DHEA, pregnenolone, thyroid (but a little too much is severely counterproductive), and especially progesterone.

To complete our bashing of estrogen, consider that between the ages of 21 and 40 there is a significant increase in women’s estrogen production. However, bone loss has been shown to actually begin around the age of 23, and progresses through the years when estrogen levels are actually rising. Most women suffer half the bone loss they are ultimately going to experience before they even reach menopause. Do you begin to see how absurd it is to blame menopause-related hormone changes for osteoporosis?

Re-read that last paragraph, and memorize it. You are going to recite it over and over again with patient after patient for years and years until the estrogen hoax is fully exposed. Each time a post-menopausal patient comes to you explaining how she just had a bone scan which showed, “the beginnings of osteoporosis,” you must make her understand that the loss of bone density has been going on since she was 23 years old, and had nothing to do with low estrogen (and probably much to do with too much estrogen and too little progesterone throughout her 20’s, 30’s and 40’s). If she shows osteoporosis today it is because of lifestyle choices she made over a period of several decades, including: insufficient exercise, insufficient sunlight, insufficient trace minerals, along with excess stress hormones such as glucocorticoids, catecholamines, and estrogen, whose excess is generally associated with the various NUTRI-SPEC metabolic imbalances.

Notice, I didn’t say anything about a calcium deficiency. Here is another critical piece of info. It has been clearly shown that many of the aging, tissue damaging and degeneration effects caused by estrogen are exacerbated by calcium, and opposed by magnesium. In this light it is seen that excessive calcium supplementation actually potentiates the damaging effect of estrogen --- including the damage of estrogen to bone

--- while magnesium has a protective effect against excess estrogen, including a protective effect against osteoporosis. The two studies you want to check in support of this are:

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.

Muneyirci-Delale, et al. Serum ionized magnesium and calcium in women after menopause: Inverse relation of estrogen with ionized magnesium. Fertil Steril. 1999, May; 71(5):869-72.

It is interesting to note that both men and women lose minerals from their bones at a rate of about 1% per year. Men have lower estrogen in youth than women do, and their bones are much heavier. During aging, however, as their bones get thinner, men's estrogen levels (unlike women's) keep rising. After about age 54 the average man actually has higher estrogen than the average woman. Similarly, muscle loss occurs at about the rate of one percent per year. Women's muscles, like their bones, are normally smaller than men's during youth, and estrogen, which inhibits muscular development, explains much of this difference. With aging, as men's estrogen levels rise, they begin to lose their muscular advantage over women.

Reiterating our comments from the last two issues of this Letter, estrogen is a damaging stress hormone to both men and women. Accelerating the loss of bone and muscle strength is just one of its many devastating effects. As regards the proper treatment for your patients with osteoporosis consider the following:

Hochberg. Preventing fractures in post-menopausal women with osteoporosis. A review of recent controlled trials of anti-resorptive agents. Drugs Aging 2000 Oct; 17(4):317-30.

This study was a review of all the recent work done on treatments for post-menopausal osteoporosis and reached several conclusions, including that, "there is insufficient published evidenced from randomized controlled trials to convincingly support the anti-fracture efficacy of ... agents ... including ... estrogen ... at this time."

Interestingly, this study did show clear objective evidence supporting calcium plus vitamin D in reducing fractures.

Please --- do everything you can to keep your patients off any form of estrogen. ESTROGEN MAKES YOU FAT, DEPRESSED, AND OLD!

Early in our presentation on osteoporosis we mentioned that there are two common dietary components that contribute to bone loss. They are caffeine and omega 6 fatty acids. The amount of **caffeine** in two cups of coffee doubles a person's calcium loss each day. The **polyunsaturated vegetable oils** have an extreme catabolic effect in breaking down bone matrix.

Watkins, et. al. Dietary lipids modulate bone prostaglandin E2 production and bone formation rate in chicks. J Nutr. 1997.

NUTRI-SPEC gives you the means to minimize and even reverse the damage done by caffeine and polyunsaturate ingestion. There are several cases of NUTRI-SPEC patients with bone studies showing not only that NUTRI-SPEC slowed the progression of osteoporosis but actually increased bone density. And interestingly --- not one of these patients took megadoses of calcium.

The essentiality of ...

HIGH INTENSITY EXERCISE ...

to prevent and to correct osteoporosis cannot be over-stated. The countless studies (see REFERENCES following this Letter) done on the association between exercise and bone density show that:

- A. Weight-bearing exercise is directly correlated with bone integrity. The distinction is made that osteoporosis is not a calcium deficiency but a reduction of the normally mineralized osteoid due to the loss of the fibrous protein backbone upon which mineralization occurs.
- B. Weight-bearing exercise is essential during childhood and adolescence to build bone of maximum density.
- C. When bone density peaks at age 23, weight-bearing exercise must be continued throughout life, and the loss of bone mass at all stages of adult life is directly proportional to the insufficiency of exercise. The character of senile bone loss closely mimics that of chronic dis-use. In other words, the loss of bone can be explained in older people just on the basis of their decreased activity alone, and has little to do with their age per se.
- D. Weight-bearing exercise begun after age 50, and even after age 70, will restore bone density to a degree, but the gains are quickly lost if the exercise regimen is terminated. Muscle strength has a

- greater correlation to bone density than does aerobic capacity in geriatric men and women.
- E. Walking alone is insufficient to stop bone loss. Jogging is the least intense exercise that will preserve bone density. Resistance exercise (strength training) and impact exercise (jumping, hopping, skipping) are far superior to running in rebuilding bone mass.
- F. Long distance running actually decreases bone mass, even in college-age runners. In older people, even excessive walking has a catabolic effect on bone. This notion carries important implications because weight bearing exercises such as walking, jogging, running, and dancing have been the forms of activity traditionally prescribed to maintain bone density. A comparison was made between competitive collegiate gymnasts and competitive collegiate runners over an 8 month training period. Bone mass in the thoracic and lumbar spine declined significantly among the runners, while the gymnasts exhibited significant increases in the hip and spine over this 8 month time period.
- G. Exercise load magnitude is a far more important determinant of bone density than is the number of load cycles. Muscle strength is related to bone bending stiffness in men, an index of strength measured independently of mass, suggesting that mechanical force has effects not only on bone mass but also on bone quality. There is a more significant correlation between bone mass and muscle mass than between bone mass and any other factor. In other words, strength training with heavier resistance and fewer repetitions, or calisthenics with greater impact and fewer repetitions, are the best means to restore and maintain bone density.
- H. A study published in the Lancet in Nov 1996 evaluated sedentary women between the ages of 35 and 45 for bone mass. Half the group remained sedentary while the other half of the group was assigned a program of high impact and step aerobic exercises three times per week. Diet including calcium intake was identical for both groups. The exercising group increased its bone mass from 1.4 to 3.7% over the sedentary group. The increased bone mass resulted from the stimulation in growth of the fibrous support structures that were in turn mineralized by calcium and the other important minerals associated with bone. The study made the clear distinction that the correction of osteoporosis involves the rebuilding of the fibrous tissue of the bone, which subsequently reclaims its minerals. This confirms the Nutri-Spec idea on

osteoporosis that it has very little to do with a primary calcium deficiency.

How do you respond to patients victimized by calcium for bones propaganda? Use the headlines offered above to explain that osteoporosis is not a calcium deficiency disease. Osteoporosis is a breakdown of bone matrix, with an inability of the matrix to hold minerals, and a decreased ability to re-build matrix via the normal osteoblastic processes. Inform the patient that as an alternative to idiotic calcium supplements she must follow a systematic bone building program:

- get natural light in the eyes (be outdoors with no glasses/contacts)
- decrease caffeine
- totally delete PUFAs
- if on estrogen, get off it → It makes osteoporosis worse (despite all the propaganda to the contrary).
- begin pumping iron and (if able) a jumping exercise regimen

With NUTRI-SPEC metabolic balancing as the foundation of your approach to bone maintenance, plus this systematic bone building program, you will effectively prevent osteoporosis in virtually all women (and men). At the same time you will be preventing all the pathological conditions that would have progressed had the patient succumbed to the 1500 mg daily calcium myth.

For patients in whom bone density is already quite low you will need to recommend extra vitamin D as an adjunct to NUTRI-SPEC. Sometimes you will add temporary supplementation with calcium orotate, particularly if the patient's NUTRI-SPEC regimen does not include concentrated sources of calcium (Formula EI, Oxygenic A, Oxygenic G, or Complex P). On a case-by-case basis you will need to evaluate the benefits of progesterone or other hormone supplementation.

Simple, logical, and scientific --- use NUTRI-SPEC to empower your patients.

To live stronger longer,

Guy R. Schenker, D.C.

REFERENCES

1. Research done by Michel, Bloch, and Fries (published in the Archives of Internal Medicine in 1989) evaluated healthy subjects over age 50 and determined that weight bearing exercise is directly related to bone integrity in the lumbar spine. Again, the distinction was made that osteoporosis is not a calcium deficiency but a reduction of the normally mineralized osteoid due to the loss of the fibrous protein backbone upon which mineralization occurs.
2. Kanders et. al. published work in the Journal of Bone & Mineral Research in 1988 showing that calcium nutrition was less important than physical activity on the bone mass of young women.
3. Dalsky et. al. published work in the Annals of Internal Medicine in 1988 showing an increase in spinal bone density of elderly women after a 9 month exercise program that included a series of resistance exercises such as rowing that specifically loaded the spine.
4. Cavanaugh et. al. published work in Bone in 1988 showing that walking alone did not stop bone loss in post menopausal women.

Comparing the work of Dalsky and Cavanaugh suggests that resistance exercise is a more potent stimulus for preserving bone than brisk walking. This notion carries important implications because weight bearing exercises such as walking, jogging, running, and dancing have been the forms of activity traditionally prescribed to maintain bone density.

The work of Snow-Harder noted below worked with young women and randomly assigned them to a control group or to progressive training programs of jogging or resistance exercise for 8 months. After 8 months the weight lifters especially, and to some extent the joggers, both showed a significant increase in the lumbar spine mineral content, but there was no change in the control group and no change in the proximal femur density of any of the three groups.

Another note on the work of Dalsky cited above is that his elderly subjects who stopped the training regimen very quickly returned to their baseline density levels, showing that for the exercise programs to deliver long term skeletal benefits they must be sustained indefinitely.

5. Work done by Snow-Harter et. al., published in the Journal of Bone & Mineral Research in 1992, showed that both resistance exercise and endurance exercise were responsible for clinically significant increases in bone mineral density in college women after 8 months of exercise

compared to the control group who maintained their habitual activity level.

6. It was reported in "Osteoporosis" published by Academic Press in 1996 that work done by Robinson compared competitive collegiate gymnasts and competitive collegiate runners over an 8 month training period. Bone mass in the thoracic and lumbar spine declined significantly among the runners, while the gymnasts exhibited significant increases in the hip and spine over this 8 month time period.
7. Work done by Myburgh et. al. published in the Journal of Bone & Mineral Research, showed that muscle strength was related to bone bending stiffness in men, an index of strength measured independent of mass, suggesting that mechanical force has effects not only on bone mass but also on bone quality.
8. Whalen and his colleagues developed a model for predicting that load magnitude was a more important determinant of bone density than the number of load cycles. Since muscle contraction is the dominant source of skeletal loading it is not surprising that significant relationships exist between indices of bone and muscle mass. Whalen's work was published in the Journal of Biomechanics in 1988.
9. Whalen's work noted above confirmed work done earlier by Doyle and Brown and Published in the Lancet in 1970 showing the relation between bone mass and muscle weight.
10. Sniaki et. al. published work in the Mayo Clinic proceedings in 1986 confirming the relationship between bone mineral density of the spine and the strength of the back extensors in healthy women after menopause.
11. Bevier et. al. published work in the Journal of Bone & Mineral Research in 1989 showing that muscle strength has a greater correlation to bone density than does aerobic capacity in geriatric men and women.
12. Work done by Frost and published in the Journal of Bone & Mineral Research in 1992 demonstrated that the character of senile bone loss closely mimics that of chronic dis-use. In other words, the loss of bone could be explained in older people just on the basis of their their decreased activity alone and have little to do with their age per se.

13. Bassey and Ramsdale in Osteoporosis did a study in 1994 comparing high impact aerobic exercise to low impact aerobic exercise and observed that after 6 months young women in the high impact exercise group had a significantly higher increase in femoral neck bone density than women in the low impact exercise group.
14. A study published in the Lancet in Nov 1996 evaluated sedentary women between the ages of 35 and 45 for bone mass. Half the group remained sedentary while the other half of the group was assigned a program of high impact and step aerobic exercises three times per week. Diet including calcium intake was identical for both groups. The exercising group increased its bone mass from 1.4 to 3.7% over the sedentary group. The increased bone mass resulted from the stimulation in growth of the fibrous support structures that were in turn mineralized by calcium and the other important minerals associated with bone. The study made the clear distinction that the correction of osteoporosis involves the rebuilding of the fibrous tissue of the bone, which subsequently reclaims its minerals. This confirms the Nutri-Spec idea on osteoporosis that it has very little to do with the primary calcium deficiency.
15. Physical activity has also been shown to be essential for the proper development of bone in children. Such was demonstrated by the research of Slemenda et. al. published in Journal of Bone & Mineral Research in 1991.
16. Recker et. al. published work in the Journal of the American Medical Association in 1992 showing that bone density does not stop increasing when growth stops if the person leads an active life with regular exercise. Bone density in young women should increase well into the third decade. It is postulated from this study that by moderately increasing activity levels in their 20's, young women may be able to increase their bone density and decrease long term fracture risk after menopause.