HUMAN FAQ

What about . . . OSTEOPOROSIS?

One of the more insidious modern, degenerative diseases is osteoporosis. It appears to be affecting people at younger and younger ages and can cause untold agony without causing death. We look at it more as a result of malnutrition rather than a disease (dis - ease) per se; simply a part of a syndrome.

Osteoporosis

According to the National Osteoporosis Foundation, *osteoporosis*, or porous bone, is a disease characterized by low bone mass and structural deterioration of bone tissue, leading to bone fragility and an increased susceptibility to fractures, especially of the hip, spine and wrist, although any bone can be affected. Bone is alive just as all cellular structures in our bodies are and as such, bony mass is constantly regenerated. Osteoporosis occurs when that process becomes imbalanced with bone being resorbed more quickly than it is replaced.

Osteoporosis can occur at any age, not just over 50, and has occurred in all ethnicities as young as 25. It is often called the "silent disease" because bone loss occurs without symptoms. People may not know that they have osteoporosis until their bones become so weak that a sudden strain, bump or fall causes a fracture or a vertebra to collapse. Collapsed vertebrae may initially be felt or seen in the form of severe back pain, loss of height, or spinal deformities such as *kyphosis* or stooped posture. Frequently it is thought that a hip can fracture first actually causing the fall itself.

Today, most medications that prevent or treat osteoporosis act on bone resorption in an anti-resorptive manner; they slow the rate of bone resorption which results in a small increase in bone. These medications include bisphosphonates (*alendronate* and *risedronate*), calcitonin, estrogen/hormone therapies and selective estrogen receptor modulators, called SERMs (*raloxifene*). Another medication, parathyroid hormone injections, acts on the bone formation part of the cycle stimulating new bone formation apparently strengthening bone and reducing fracture risk.

Dietary recommendations usually include taking at least 1200-1500 mg of calcium and 400-800 International Units of vitamin D every day to increase calcium's absorbability. Regular weight-bearing exercise is also considered a part of any osteoprosis prevention or treatment plan.

THE HOLISTIC VIEW

That is the common medical, or *allopathic*, viewpoint. Now let's take a look at osteoporosis from a more holistic stance.

Bodily pH

Just why, in so many people, is there insufficient calcium available for proper bone regeneration? In essence, bones act as a sort of an "alkaline bone bank" to buffer against an over-acid diet. An alkaline pH balance is critical to our core regulations of both blood (whether nutrient carrying, coagulation, pressure, etc.) and nerve/muscle tissues which includes regulating the heart rhythm. If that buffering is not met through normal nutrition, then calcium and other alkalizing minerals such as magnesium are "withdrawn" from the "alkaline bone bank." Bottom line, nature considers the ability to stand far less vital than the ability to keep the heart pumping.

The major cause of an acidic pH in our bodies is an acidic diet. This occurs when we consume too few alkalizing vegetables and fruits with a consequential overabundance of proteins or grain. Non/anti-nutritious foods such as coffee, tea, pop, sugar, candies, pastries, are all highly acidic. Many holistic practitioners believe that our diet should consist of 80% alkaline (vegetables/fruits) and only 20% acid (everything else). Other practitioners lower the alkaline ratio a bit depending on metabolic type, but usually no lower than 65-70% at a minimum. Unfortunately, most of us, at least if we are honest with ourselves, fall into approximately the reverse ratios.

Generally speaking, if one's diet consists of more than 47 grams of protein, more calcium will be taken from bone tissue to buffer the blood than is replaced. When you consider that a 6oz sirloin steak alone contains 54 grams of protein (6 oz poultry = 40 while 1 egg = 6) without even factoring in the daily amount of grains/nuts/seeds consumed, you can see how easy it really is to end up with an acidic pH rather than an alkaline one. This is something to bear in mind if considering a high protein weight-loss diet which can also lead to bone-loss or at least joint-stiffness.

Unfortunately, the milk that is so frequently suggested by physicians to increase one's calcium intake not only contains 9 grams of protein, but also the pasteurization process has rendered the protein indigestible and the calcium inert, rather like that contained in drywall or Tums. Since they must be deposited somewhere, ingesting such acid-causing inorganic minerals (oxides, sulfates and carbonates) in general can only lead to other metabolic problems over time such as hardening of the arteries, arthritis, or even right back to osteoporosis. However, minerals gained from vegetables and fruits are organic, bioavailable and alkaline in nature; that is, *chelated* or bonded to two amino acids with the resultant molecular weight being less than 1500 Daltons in order to pass through cellular walls.

A person's blood should register a slightly alkaline 7.4 pH in order to be functioning healthfully and one's morning urine should test 6.8 on litmus paper. Perhaps a more simple way to gauge pH balance is to make a fist at night before sleeping and again in the morning upon waking. If it is harder to make a fist in the AM, you are consuming too much acid-forming food; if you can make a fist easier in the AM than at night, you are even more toxic. The ease of fist-making indicates cellular fluid content; if over-acid, edema will result making fist-forming more difficult. Another sign of edema (acidity) is if your rings are tight in the AM; rings or other gold/silver jewelry turning skin dark indicates even more toxicity.

Since negative emotions or stress can also acidify our pH balance, it is wise to practice deep breathing or meditation.

Calcium, Vit D and Magnesium

Another common misperception is that it is *only* Vit D that aids in calcium absorption. In reality, magnesium levels may be far more important. Vit D (fish oil) supplementation tends to be unnecessary for almost all but the most ardent avoider of sun or for those living in northern climates.

As far back as 1990, Dr. Guy Abraham published a

study in The Journal of Reproductive Medicine emphasizing that magnesium is the key to bone integrity. In the study, people experienced an 11% gain in bone density over a year by ingesting more magnesium than calcium: 600-1000 mg of magnesium per 500 mg of calcium. An Israeli study demonstrated bone increase of 8% when magnesium was used alone with NO supplemental calcium. Another researcher, Dr Alan Gaby found that high stress people may need up to ***8 times*** more magnesium then calcium, and he has eliminated osteoporosis with a ratio of 3 times magnesium to 1 part calcium.

Hormone Replacement Therapy (HRT)

Recently HRT has been receiving negative press for some very valid reasons. As for its value in treating osteoporosis, however, this has been questioned since 2001 although many physicians are either unaware of, or have ignored, the research.

In her Feb 2002 Lark Letter, Susan Lark, MD, cites a study published in the American Journal of Medicine April 2001 which indicated that hormone replacement therapy with estrogen/progestin was totally ineffective against osteoporosis. An earlier segment of that same study showed HRT also did *not* protect against heart disease. In fact, the FDA, knowing this, then began limiting the claims that the drug manufacturers could make regarding estrogen replacement therapy. Unfortunately, HRT continues to be pushed by pharmaceutical company representatives to physicians; we can only surmise it must be a big money maker for them.

Thyroid and adrenal glands

An under-active thyroid gland, whose hormones influence essentially every organ, tissue and cell in the body, has been linked to certain types of diabetes, arthritis, anemia, elevated cholesterol levels, heart disease, infertility, muscle weakness and ***osteoporosis***. By the age of 60, up to 17% of all women and 9% percent of all men have an underactive thyroid. Holistic practitioners believe that the TSH reading is probably more important and accurate than the T4 or T3 readings normally done in a blood test.

Under-active or stressed thyroids can cause fatigue, intolerance to cold, loss of appetite, weight gain, muscle weakness, depression, hair loss or inappropriate hair growth, and dry and scaly skin. Unfortunately, synthetic thyroid hormone, which is the standard answer, tends to cause dependence and eventual cessation of any normal thyroid function at all necessitating a lifetime of synthetic thyroid support. Interestingly, one key to thyroid health is adrenal support; adrenal exhaustion is one of the primary reasons that the thyroid stresses and in turn, itself becomes exhausted.

A simple home test you can do for yourself to determine thyroid activity is an iodine patch test. Purchase a small bottle of the same tincture of iodine that used to be put on cuts and scrapes. Daub about a 1" square spot on the inside of your arm just below the elbow. The resultant stain should stay present for at least 24 hours; if it disappears in less time, that means your body is trying to get iodine wherever it can.

Another way to gain data is to take your morning temperature. Shake a mercury thermometer down to 95º and place it on your bedside table. In the morning before rising, place the thermometer in your armpit, clamp your arm to your side and lay there quietly for 15 min. If your temperature registers below 97.6F, that generally indicates an under-active thyroid.

Bone Density Test

According to one holistic dentist, bone density can also be derived from a relatively simple fasting blood draw or "carbo index" and is determined by the calcium:phosphor-ous ratio. This DMD states that the ideal calcium:phosphorous ratio is 2.5:1 and it is this ratio which is more important than so-called "normal" ranges. His method for such a determination is to:

- take the blood level phosphorous value
- multiply times 2.5
- subtract this value from the blood level calcium value
- the resulting value is called the Ca index
- a Ca index greater than .8 indicates loss of bone density.

Diet and Supplements

Obviously, the first thing to do is to begin alkalizing the diet. Usually it is better to do this over a few weeks or even months rather than all at once. Slowly replace the "junk food" in your diet with real, unprocessed and preferably organically grown food, with only free-range animal products. Pay close attention to your alkaline:acid ratio and head toward approximately an 80:20 one; some metabolisms may require slightly less on the alkaline side. If you must have that morning coffee (which, by the way, can deplete the adrenals), follow it up with some **Herbal Green**.

Most physicians suggest taking calcium in the form of citrates, oxides, or sulfates in the amount of 1000-1500 mg per day. However, specially chelated minerals, like those within the ***DYNAMITE*** products, are over 3x more bio-available to the body which means that standard NRC recommendations, based only on the inorganic form, need to be cut by one third. The NRC recs also fail to take into consideration an individual's pH balance, magnesium level, etc. Many holistic practitioners believe that bone receptor inhibitors, like Fosamax (*alendronate sodium*), tend to make bones more brittle rather than truly stronger as will proper supplementation.

One chiropractor, a ***DYNAMITE*** Director, actually *reversed* bone loss (verified by monthly bone density scans performed during a University of Washington study) in a client within three months by having her take ***DYNAMITE*** **Elixir** (aids in digesting everything better; begins alkalizing the system; considered part of the Basic Program), **PMS** (aids calcium absorption; calms stress levels) and **Herbal Green** (alfalfa and barley extracts promote alkalinity; adaptogenic qualities of yucca and ginseng support adrenal function) ***only***, no extra calcium at all. For long term use, since chelated magnesium like **PMS** does not interact with other minerals, it is best to take them along with the Basic Program consisting of ***DYNAMITE*** **Regular** or **Plus**, **TriMins+** and **Elixir**. Those requiring thyroid, hypothalamus and blood sugar support might add **DynaLite** while some individuals might find the high silica **Cell Mend** to also be an appropriate addition.

Exercise

Along with standard weight-bearing and cardio-vascular exercises, Tai Chi and/or Yoga can enhance flexibility, proper breathing and relaxation, thus releasing acid-forming stress and supporting the balance of the entire body.

ULTIMATELY, WITH A stable alkaline pH, bio-available minerals and effective stress-release programs, osteoporosis may never need to be feared again. ■