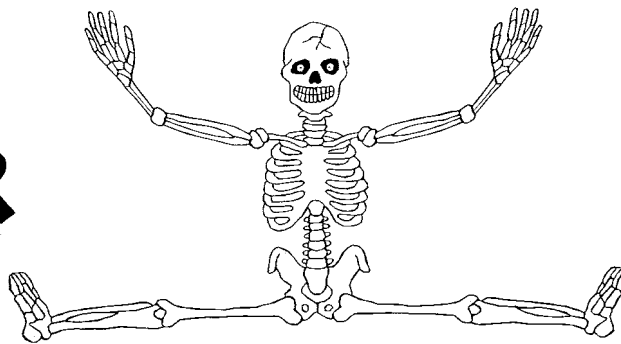


BUILD BETTER BONES



A Natural Approach to Preventing and Reversing Osteoporosis and Other Bone Problems

Osteoporosis is a decrease in bone density that causes skeletal weakness. Prior to the 1970s, osteoporosis was considered rare and was only diagnosed in the elderly after a fracture. Today, this problem has become epidemic in both the United States and many European countries.

Studies by the National Osteoporosis Foundation show that one in two females and one in four males over 50 years old will have an osteoporosis-related fracture. This means that 50% of older women and 25% of older men are at risk for fractures due to weakened bones. Current estimates are that ten million people in the U.S. have osteoporosis.

The numbers show no signs of improving despite the millions of dollars spent on pharmaceutical research, as well as increased bone mineral density screening. Christine Northrup, M.D, a specialist in women's health, states that bone density scans do not measure bone strength or quality. In fact, 50% of people with thin osteoporotic bones never fracture. Also, older folks in France, Germany, China and Japan have lower bone density than Americans, yet suffer fewer osteoporosis-related fractures.

All this suggests that bones do not fracture due to thinness alone and that bone strength or quality is more important than bone density. Because of this, Dr. Northrup suggests that millions of women are getting unnecessary tests and taking medications without evidence that the drugs are safe or effective.

Why Are Our Bones Weakening?

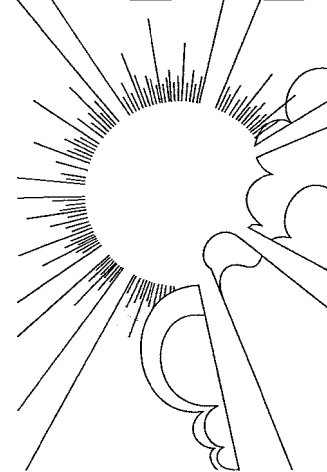
The common belief is that we aren't getting enough calcium in our diets. However, if that were actually the case, then all the dairy products, calcium-fortified foods, calcium-based antacids and calcium supplements we consume would be fixing the problem. The fact is, that this increased calcium intake doesn't make the problem better.

Osteoporosis didn't exist in native cultures and according to Dr. Susan E. Brown, director of the Osteoporosis Education Project, hip-fracture rates vary worldwide by as much as 40-fold. The greatest problems exist in the U.S. and Europe. Osteoporosis is not a major problem in underdeveloped countries and Asia. (Interestingly, the Chinese have a very low incidence of osteoporosis and they don't consume dairy products, take calcium supplements or use hormone replacement therapy.) Clearly, the "solutions" we're being given by the medical profession, the pharmaceutical industry and media aren't addressing the real cause of bone weakness.

Like so many health problems we experience in modern civilization, bone weakness is a result of our modern lifestyle and is not going to be solved by magic "pills" or quick fixes. In this issue of *Sunshine Sharing*, we examine the real reasons why our bones are weakening and what we can do about it. This information is not only valuable for preventing and even reversing osteoporosis, it can also help you have stronger teeth, prevent and even heal arthritic joints and have better overall health.

Turn the page to see how you can build better bones...

SUNSHINE SHARING



Your guide to better health the natural way.

Vol. 19 No. 7

Important Notice

The information in *Sunshine Sharing* is for educational purposes only and should not be used to diagnose and treat diseases. If you have a health problem, we recommend you consult a competent health practitioner before embarking on any course of treatment.

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Natural Ways to Build Better Bones

Bones are neither solid nor static; they are living tissue that is continually being renewed. A normally functioning body builds and maintains lifelong healthy bones that are strong and resistant, yet flexible enough to tolerate twisting and bending without breaking.

Bone building consists of an array of complex biochemical reactions that maintain a balance between breaking down old and injured bone and building new strong, but flexible bone. Old bone is constantly being dissolved and reabsorbed and new bone is constantly being laid down in its place. Because of this, bones, like every other tissue in the body, need a constant supply of nutrients to keep them healthy. Bones weaken when the breaking down process occurs more rapidly than the building up process.

Minerals and Bone Health

We're constantly told that calcium builds strong bones. This is because calcium is both the most abundant mineral in the body and the most abundant mineral in bones. But bones are made of much more than calcium. Bones contain other macro minerals such as magnesium, phosphorus, sodium, chloride, potassium and sulfur. They also need trace minerals such as silica, iron, molybdenum, copper, zinc, fluoride, selenium, chromium, manganese, iodine, and cobalt. In addition, vitamins like C and D, protein and other nutrients are also required for bone health.

This explains why calcium supplements alone will not build strong bones, especially since few Americans are, in fact, deficient in calcium. What they are actually deficient in are the other trace nutrients that are needed to make proper use of the calcium already in their diets. So, the biggest problem contributing to osteoporosis is a lack of nutritional density in our diets.

This problem starts with modern agricultural methods. Plants absorb minerals via bacteria and other microbes which are present in "living" soil that is rich in natural organic material. Modern agricultural practices not only fail to replenish trace minerals in the soil, they also kill the microbes through the use of agricultural chemicals. This has caused dramatic drops in the mineral levels of modern foods. This loss of mineral (and general nutrient value) is further compounded by processing methods, which further depletes nutrients from foods.

pH and Bone Health

A lack of trace minerals and nutritional density is the primary reason our bones are weaker, but there is another contributing factor. Remember that building up bone (which requires all these nutrients) is balancing a constant break down of bone from wear and tear. An overly acidic diet causes bone to break down more quickly because alkalizing minerals like calcium, magnesium, sodium and potassium are "borrowed" from bones and other tissues to help counteract the excess acid.

This general overacid condition is caused by a diet high in soda pop, coffee, alcohol, grains, meat and interestingly enough, dairy. Alkalizing foods tend to be fresh fruits and vegetables, in which

most diets are low. High levels of stress, air pollution and shallow breathing also make the pH of the body become more acidic.

Other Important Factors in Bone Health

When astronauts spend long periods in outer space, they suffer a loss of bone mass. This is because their bodies are not having to work against gravity. Bone is built in response to the body's need for structural support. This is why weight-bearing exercise helps keep bones healthy.

There are also a number of hormones involved with the breakdown and rebuilding of bone. So, health of the glandular system is important to bone health. However, it's not as simple as just using estrogen or progesterone supplements, because many other glands are involved in bone health.

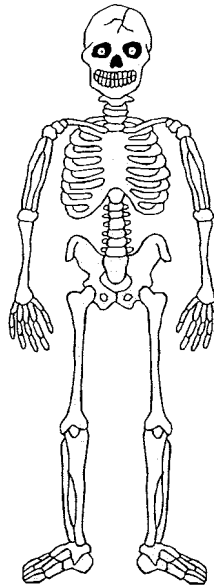
Parathyroid hormone stimulates the kidneys to convert vitamin D to its active form. It also acts to dissolve calcium and other alkaline minerals out of the bone into the blood stream to neutralize excess acid in the body. Glucocortical adrenal hormones and the sex hormones estrogen and androgen play a role in remodeling bone as well as calcitonin and thyroxin (from the thyroid), insulin from the pancreas and growth hormone from the pituitary.

The bottom line is that bone health is connected to overall health. So, you can't have healthy bones without working on your health in general.

Supplements for Bone Support

Your bones support you, but as you can see, you also need to support your bones with good nutrition. Fortunately, there are numerous herbs and nutritional supplements that can help support the health of bones and joints. Calcium, of course, is an essential element for the health of bones, but it needs to be combined with other nutrients in order to be effective. See the sidebar "Getting the Calcium Your Body Needs" on the next page.

Calcium requires vitamin D for proper absorption and utilization. In concert with the parathyroid hormone, vitamin D is essential for absorbing calcium in the small intestines and for



Additional Help and Information

For more information on preventing or reversing osteoporosis, natural approaches to arthritis or working with other bone problems with natural remedies talk to the person who gave you this newsletter. They have additional handouts and resource materials to help you. You can also consult some of the following sources for more information:

Healthy Bone and Joints by David Hoffman.

Strong Women, Strong Bones by Miriam E. Nelson.

Better Bones, Better Body-Beyond Estrogen and Calcium by Susan E. Brown.

Herbal Healing for Women by Rosemary Gladstar.

Dietary Supplement Fact Sheet Vitamin D and D3 by the Office of Dietary Supplements, National Institutes of Health

maintaining adequate serum calcium and phosphate concentration that enable normal mineralization of bones. Few foods naturally contain vitamin D; the best sources being fish liver oils. There is also a small amount in beef liver, cheese and some mushrooms.

The best form of vitamin D is **Vitamin D3** (cholecalciferol). This fat-soluble vitamin is produced in the skin when it is exposed to sunlight, specifically ultraviolet B radiation. Many studies have shown that vitamin D3 supports bone health, organ health and even helps fight cancer.

Phosphorus is the second most abundant mineral in the body and is necessary for strong bones and teeth, which are composed primarily of calcium phosphate. Diets high in fructose (including high fructose corn syrup) increase urinary loss of phosphorus. Bone meal (found in **Calcium Plus Vitamin D**) supplies calcium phosphate for bone health, but you need to have good production of hydrochloric acid in your stomach to digest and assimilate it.

Magnesium is another mineral that works in concert with calcium and is involved in the structure of bones, cell membranes and chromosomes. 60% of magnesium is found in the skeleton and 27% is found in muscle. The ratio of calcium to magnesium for humans should be 2:1 and it has been established that more people are deficient in magnesium than calcium. **Magnesium Complex** or **Chlorophyll Capsules** are good supplements to increase magnesium levels in the body. Good food sources are chlorophyll-rich dark green leafy vegetables, kelp, nettle, horsetail, sage and oat straw.

The third most abundant mineral in the body is potassium. Potassium also plays a role in bone density. It helps prevent osteoporosis by counteracting increased urinary calcium loss due to high dietary salt intake. Potassium is abundant in green leafy vegetables and can be supplemented with **Combination Potassium**.

Trace minerals, such as boron, vanadium, zinc and copper are all important for bone health. **Colloidal Minerals** or **Mineral Chi Tonic** are great supplements for increasing trace mineral levels in the body.

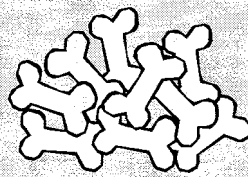
Skeletal Strength

Fortunately, you don't need to take all the supplements listed above to get the nutrients needed for healthy bones. **Skeletal Strength** contains the major minerals and vitamins needed to create healthy bones in a base of herbs. For starters, it contains equal parts of magnesium and calcium, which helps to balance the abundance of calcium and magnesium deficiency present in most diets. It also contains phosphorus, iron, zinc, copper, manganese and boron along with vitamins A, C, B6, B12 and D.

Studies have shown that when calcium is combined with other nutrients in this manner, it is far more efficiently utilized and absorbed. So, a supplement like **Skeletal Strength** is far more beneficial for maintaining bone health than a calcium supplement by itself.

There are other nutrients that can help with bone and joint health besides minerals. Protein is also an important part of healthy bone and connective tissue, particularly a protein called collagen. Collagen is the "cement" or "glue" that helps hold tissues together.

Continued on page 4



Getting the Calcium Your Body and Bones Need

Calcium is the most abundant mineral in the body, so we do need large amounts of it. However, just taking calcium supplements alone won't insure we're getting calcium into bones and tissues. So, the question naturally arises; what is the best way to get the calcium we need?

Dairy products are widely promoted as a good source of calcium. However, countries with the highest incidence of osteoporosis and bone fractures are also the countries that consume the most dairy products, which shoots that idea down. Part of the problem is pasteurization. Pasteurization destroys the enzymes and many of the nutrients present in whole milk that help calcium to be absorbed and utilized.

Also, unlike calves, humans do not have the enzyme to separate a molecule called casein from the calcium in cow's milk. So, although there is a lot of calcium in dairy, it isn't efficiently absorbed. The best dairy sources of calcium are cultured dairy foods (like yoghurt) because the lactobacillus bacteria they contain make the nutrients easier to assimilate.

Calcium carbonate (chalk) is the cheapest and most abundant form of calcium and can come from dolomite, oyster shell or coral. It is the form of calcium found in Tums® and other antacids. This form of calcium is a quick alkalizer, but is poorly absorbed and utilized in bones and other tissues.

Bone meal from New Zealand isn't contaminated with lead and can supply calcium and other trace minerals needed for healthy bones as long as you have good stomach acid production and digestive function. **Calcium Plus Vitamin D** contains New Zealand bone meal. You can also get bone calcium from canned pink salmon and canned sardines, because the bones are cooked with the meat and become soft enough to eat.

Another great way to get calcium (and bone-building minerals and nutrients) is to make your own soup broth from the bones of chicken, fish or beef. The nutrient-rich broth will contain everything you need for healthy bones and connective tissues.

However, if you want to get the best source of calcium, take a lesson from the cows. Where do they get their calcium? They get it from the grass and green leafy foods they consume. The most easily assimilated and utilizable form of calcium is that found in dark green leafy vegetables such as collard greens, spinach, turnip greens, beet greens and Chinese cabbage.

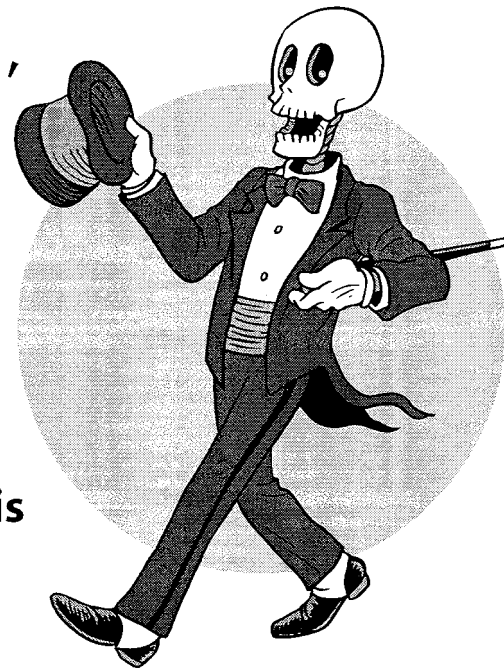
Herbal greens such as wheat grass, barley grass, nettles, dandelion leaf, alfalfa and oatstraw are also good sources of calcium. For this reason, consider using **Herbal CA** or **HSN-W** as a supplement to increase calcium absorption and improve bone health.

If you want a calcium supplement, consider **Skeletal Strength** which supplies vitamins, trace minerals and other nutrients along with calcium to make it more easily assimilated and utilized. You'll get far more benefit from calcium when it is combined with other nutrients either in whole foods or supplements.

YOUR BONES SUPPORT YOU, SHOULDN'T YOU SUPPORT THEM TOO?

Nourishing your bones can help:

- ☛ Improve your overall health
- ☛ Speed the healing of broken bones
- ☛ Prevent and even reverse osteoporosis
- ☛ Prevent arthritis and
help arthritic joints to heal



It is vital to creating flexible strength in bones, joints, tendons, ligaments, fingernails and other tissues.

Collatrim capsules and **Collatrim Plus** are both good sources of collagen as is broth made from soup bones. Collagen supplements can help with arthritis, weak joints, damaged cartilage, slipped or torn ligaments and slipped or bulging disks. As an additional benefit, Collatrim or Collatrim Plus can be taken at bedtime to help with weight management and building lean muscle mass.

Silica, although not as well known as other minerals, can also help to build healthy bones and joints. Silica helps impart flexible strength to hair, skin, nails, joints, bones and nerves. **HSN-W** is a great herbal formula that supplies silica, calcium and other nutrients. It helps the body utilize calcium and is very effective at helping build healthy bones and connective tissues. **HSN Complex** also supplies silica and promotes circulation to the scalp and

skin to promote healthy hair, skin and fingernails as well as bones and joints.

Herbal CA contains herbs that are high in magnesium, calcium and silica. It supports bone health, helps tissues to heal quickly and aids the nervous system. Another formula that helps bones heal quickly is **Bone & Skin Poulitice**. This formula also helps with arthritis, bursitis, joint weakness and speeds healing of damaged tissue.

Since maximum bone size and density, or peak bone mass, is reached between 25-30 years old, the best prevention begins in youth. With good nutrition, supplementation, exercise, lifestyle changes, osteoporosis can be eliminated as a major public health concern. Ask the person who gave you this newsletter for additional help in putting together a program to build your own bone health.