

# Nature's Field

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An Electronic Journal for NSP Distributors

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## Oats

(*Avena sativa*)

By Steven Horne and Paula Perretty

In herbalism, there is no line between food and medicine. Many “medicinal” herbs have been eaten as food and many “foods” have medicinal value. Oats are an excellent example of a plant that is both a food and a medicine. With a long history of cultivation as a food crop, oats originated in three separate geographic regions, Abyssinia, the Mediterranean and China. Today, oats (*Avena sativa*) are grown in the U.S., Canada, Russia, Turkey, Iraq, UK, Spain and Germany.

The grain (seed) is harvested and milled to produce oatmeal and oat groats. The oat grain is a highly nutritious whole grain that has been used by natural healers as a food for the chronically ill to help restore vigor to the body.

Oatbran, made from the husks of the grain, is a great source of fiber for the colon. It has been shown to reduce cholesterol and reduce the risk of colon disorders and heart disease. Oatbran is found in LOCLO, a fiber supplement designed to lower cholesterol, Nature's Three and Healthy Blast.

Another valuable part of the oat plant is the straw. This refers to the dried grass stalks and leaves from the oat plant. Oat grass, like wheat and barley grass, is a nourishing food with many nutritional benefits. Both the green oat grass (harvested when the plant is flowering) and the mature oat grass (after the seeds have been harvested) have been used as medicine.

Oat straw is primarily used as a source of minerals like potassium, phosphorus, magnesium, calcium, chromium, iron and selenium. It is a structure building remedy that helps build healthy bones, teeth, hair and nails. It has been traditionally used as a tea (or strong decoction) for this purpose. It is one of the key ingredients in the NSP formula Herbal CA (i.e., Herbal Calcium), which is used to enhance the structural system of the body and help bones and injured tissues heal.

Oatstraw is also an ingredient in a formula my midwife friend, Joan Patton, developed, which I call Herbal Minerals. You can make a great herbal mineral tea by combining equal parts alfalfa, nettles, oatstraw and red raspberry with a smaller amount of peppermint leaf. Make a decoction of this mixture by bringing a quart of water to a boil in a saucepan and adding

one to two heaping tablespoons of the herbal mixture. Cover the pan, turn off the heat and allow the mixture to steep for at least 20 minutes.

Oats have also been used as a mild tonic for the nerves. The whole plant has this quality, but it is strongest in the seeds when they are in the milk sugar stage. Just like corn on the cob is juicy and sweet but dries into the grain we call corn, oat seeds are also sweet and juicy before they are fully mature. Herbalists harvest these milky seeds and tincture them to produce an excellent nerve tonic that helps rebuild enervated or “frayed” individuals.

Oats, including oatmeal, and oat straw also help the nerves. Oats act as a natural anti-depressant and mild sedative. Oat straw tea and the flower essence made from the oat flower have been used to aid the nerves in conditions such as headaches, depression, tension, insomnia, anxiety and feelings of melancholy and sadness.

Oatstraw tea has also been used as a blood tonic to aid circulation. It helps relieve hemorrhoids and varicose veins. It also boosts the immune system, gently supports the adrenals and stabilizes blood sugar levels.

Because of its reputation for enhancing libido, oatstraw is an ingredient in both X-Action for Men and X-Action for Women. The aphrodisiac effect probably has to do with oats ability to nourish the nerves, improve circulation and stabilize blood sugar. Increased sensitivity to touch, improved blood flow and enhanced energy will help anyone feel better.

### Selected References

- PDR for Herbal Medicine* published by Medical Economics Company.  
*Drugs & Natural Alternatives* by Clell M. Fowles.  
*Handbook of Energy Crops* by J. Duke.  
*Healing Wise* by Susun Weed

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# Marrow in the Bones

## *Why Healthy Bones are Essential to a Healthy Body*

by Steven H. Horne, RH (AHG)



*“It shall be health to the navel, and marrow to the bones.” (Proverbs 3:8)*

In the religious tradition I grew up with the phrase “health to the navel, marrow to the bones” which was a symbolic representation of what it means to be blessed with good physical health. I have pondered this phrase and think that it contains deep symbolism about what is necessary for us to have good physical health.

Many Nature’s Sunshine Managers I know really stress the importance of the first part of this phrase, “health in the navel.” The navel (or belly button) sits directly over the small intestines and I believe this is symbolic of having a healthy digestive tract. Many of us understand that a major reason why people are sick is because they are constipated, suffer from intestinal inflammation and leaky gut or have other digestive problems. In other words, most people lack “health in the navel.”

Many of us can attest to the benefits of working on the digestive tract as a means of improving overall health based on our own experience. Digestive enzymes, probiotics, increased fiber and a periodic colon cleanse improve overall health and mood. Working on the digestive tract is especially valuable in clearing up depression, respiratory ailments (sinus problems, asthma, etc.), skin problems (acne, eczema, etc.), inflammatory diseases (arthritis, etc.) autoimmune disorders (fibromyalgia, Lupus, etc.) and even general aches and pains such as headaches and backache. So, it is very clear to me that “health in the navel” is a vital key to overall health.

However, even in the natural health field, most people fail to grasp the importance of “marrow in the bones” to overall health. That’s because we tend to think of bones as simply providing support for the body. We also tend to think of bones as static or fixed because we have also seen the rigid nature of dead bones.

However, both of these viewpoints are essentially wrong. First of all, bones do a lot more than structurally support

the body, as we will discuss in this article. Furthermore, the bones in our body are living tissue and as such are constantly in a state of flux, breaking down and rebuilding themselves. So, with that understanding, let’s examine the importance of bones to our overall health.

### Your Mineral Bank Account

The major reason bone health is critical to good health in general is that bones are the body’s mineral storehouse and minerals are the “dust of the earth” from which our body is made. Bones absorb minerals when they are available in the diet and release them as they are needed by other tissues. This is part of the reason why the structure of bones is always in flux.

Unfortunately, when people think about minerals and their bones, all most people think about is calcium. For example, I purchase natural cleaning products from a particular company. When I joined and made my initial purchase of cleaning products, they sent me a couple of free gifts. One was caramels made with calcium carbonate that were supposed to help you have healthy bones. (The other was protein bars sweetened with Splenda®.) I threw both of these products away.

I don’t know where people got the idea that all you need for healthy bones is calcium, but it’s a perfect example of the reductionistic thinking that characterizes our modern approach to health. (Calcium is being lost from the bones, so all you need to do is take more calcium.) Well, if you think like this, then I have some news for you—taking calcium, and especially calcium carbonate, isn’t going to give you healthy bones. In fact, calcium carbonate is more likely to give you bone spurs, kidney stones and increased plaque formation on your teeth, than it is to give you healthy bones.

Yes, calcium is the most abundant mineral in bones (and in the rest of the body, too), but bone is a storehouse of numer-

ous other minerals, too. You can't make bone with calcium alone. You need the right forms of calcium, fats, proteins and vitamins to assimilate it and many other minerals in order to produce bone. In fact, it is these other minerals that give bones their strength, flexibility and durability.

### Steel is More Than Iron and Bone is More Than Calcium

To help you understand why these other minerals are so important, let's draw a comparison between the calcium in our bones and the iron in steel. Iron is the major component in steel, but iron alone doesn't make steel.

I have a cast iron frying pan, which I really love to cook in. It's heavy, and it's quite strong, but it's also quite thick and relatively brittle. If I were to start pounding it with a sledgehammer, I might actually be able to crack it or break it.

I also own some stainless steel frying pans. The ones I currently own have an aluminum core, but I used to own a couple that were just plain stainless steel. Like my cast iron, my stainless steel pans are also strong, but they are much thinner and more flexible. If I had started pounding on a steel frying pan with a sledge hammer, it would probably get dented and warped, it would bend, not crack or break.

So, what's the difference? It's in the other elements that are blended with the iron. Cast iron is primarily iron with a high carbon content. Steel has a lower carbon content and is blended with other metals such as manganese, chromium, vanadium and tungsten. By adjusting the quantity of other minerals in the steel, manufacturers can make the steel more or less flexible and control other qualities in the finished metal.

If you think about the structure of calcium carbonate, also known as chalk, it is soft and brittle. Calcium needs to be combined with other minerals such as phosphorus, magnesium, copper, zinc, manganese, vanadium, boron and silicon in order to have the flexible strength we associate with strong healthy bones. These other elements also create durability in the joints that protects them from becoming damaged and arthritic.

Furthermore, these mineral depositions are held together in a protein matrix which creates the bone structure. This protein structure is composed of a special protein called collagen, which when hydrolyzed (broken down in water) becomes gelatin. This same protein forms the basis of cartilage, which protects our joints.

Once we understand these facts, it's very easy to explain why people have so many problems with their bones in Western culture. It's not from a lack of calcium, per se, but more from a general lack of good nutrition, especially trace minerals.

### The Health of Teeth and Bones Reflects the Overall Nutritional Reserves of the Body

This conclusion is supported by the work of Dr. Weston Price, author of *Nutrition and Physical Degeneration*. In the 1930s, Dr. Price, a dentist, traveled the globe studying the diet, dental health and general health of people living on traditional diets, versus people living on modern diets in the same part of the world. Everywhere he went, Dr. Price found the same pattern. Native people living on traditional diets had practically perfect bones and teeth and wonderful physical health to go with it.

Dr. Price concluded several things from his research. One was that the health of the bones and teeth was correlated with overall health. That is, if people had healthy bones and teeth (well formed jaws, solid bone structure, no cavities or

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gum disease) they experienced excellent mental and physical health and were highly resistant to contagious diseases.

A second conclusion of Dr. Price was that tooth decay was one of the primary signs of malnutrition. Teeth and bones are both composed primarily of minerals, so a lack of health in the teeth suggests mineral deficiency in the bones, too. Thus, our problems with tooth decay are intimately linked with the widespread incidence of arthritis and osteoporosis in our culture. Dr. Price's research suggests that these structural problems are essentially evidence of malnutrition.

The conclusion Dr. Price came to in his research was that traditional foods, and traditional diets, were more nutritionally dense. That is, there were more nutrients (minerals, vitamins, etc.) present in the food traditional people consumed than are found in the same quantity of food in modern diets.

Modern research supports Dr. Price's conclusion. I have seen other research that suggests that the mineral content of commercially grown fruits and vegetables may be as much as 90% lower than fruits and vegetables organically grown in traditional, compost-rich soil. Since bone is the mineral storehouse of the body, if we are eating a diet that contains less than 10% of the trace minerals it should, it is no wonder our mineral storehouses become increasingly empty as we age.

Let me add a special note here about pregnant women, since that was last month's topic. Many women develop problems with teeth, hair, bones and skin during pregnancy or after repeated pregnancies. The reason for this is simple—the developing baby gets first “dubs” on the minerals and mom's mineral reserves become depleted. This explains why my midwife friend Joan Patton found that giving women a formula of mineral rich herbs during pregnancy (see next page) eliminated 90% of complications in pregnancy.

### Calcium is Necessary, But....

Let's go back to that calcium issue for a moment. Have you noticed how much commercial food is “fortified” with calcium lately? They put the stuff in soy milk, orange juice, breakfast cereals, etc., all promoting the idea that this is going to help your bones. With all this calcium supplementation and calcium fortification in foods, I think most people are actually getting too much calcium, or at least too much of the wrong kind of calcium, since the cheapest and easiest form of calcium to use for supplementation is calcium carbonate.

The problem with calcium carbonate is that it neutralizes hydrochloric acid production. Hydrochloric acid is absolutely essential to absorbing calcium, magnesium, iron and numerous other minerals. The calcium in calcium carbonate is absorbed as free calcium. Calcium must be properly bound in the gut to be utilized by bones and tissues. Unbound or free calcium is generally flushed out of the body through the kidneys and increases the risk of kidney stones. A high level of unbound calcium in the blood is also a risk factor for cancer.

If one is going to use calcium supplements, I think one should at least consider forms of calcium like amino acid chelates, calcium citrate or other forms which assimilate better. However, the best way to get calcium is from the diet.

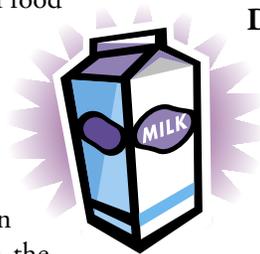
### Dairy Products and Bone Health

This brings me to the dairy issue. Dairy products are rich sources of calcium, so why do the countries that consume the most dairy foods also have higher incidences of osteoporosis-related fractures? Asian cultures, which use a minimal amount of dairy have some of the lowest incidences of osteoporosis in the world. By the way Asians don't use calcium supplements or fortify food with calcium, so why isn't osteoporosis rampant in China and Japan?

The answer is obvious if you just think about it. How do cows get so much calcium in their milk? Where does all that calcium come from? It comes from the cow's diet, of course. And what do cows eat? They eat green foods like alfalfa, various grasses and other green leafy plants. What do Asians eat more of than we do—green leafy vegetables. The best foods for getting calcium to build strong healthy bones are Swiss chard, beet greens, turnip greens, collards and even broccoli.

It's not that dairy foods are bad, per se. Weston Price found tribes in Africa that lived primarily on milk and blood from their cattle. These tribesmen were completely free of cavities and totally immune to all diseases like malaria and yellow fever. Their animals weren't being fed hormones, antibiotics and commercial feed; they were grazing on green plants. Also, the milk these animals produced wasn't pasteurized, homogenized, skimmed and “fortified.”

So, yes, if you can get fresh *raw* milk from “grass fed” cows that have been grazing on good pasture, it would be great for your bones. However, I would suggest that it wouldn't just be because of calcium in the milk. Such milk would



contain the other trace minerals and nutrients needed for strong bones and good general health.

### Restocking the Storehouse

So, let's get back to that phrase, "marrow in the bones." By now, it should be very clear that we need an abundant supply of minerals in the diet to be healthy. The health of the bones and teeth is the indicator of whether we are being adequately nourished, and particularly if we are getting enough minerals. If you (like me) have had cavities, impacted wisdom teeth and problems with gum disease, then it's fairly safe to say that your nutrition (like mine) has been compromised.

Fortunately, bones aren't static, so if we start improving our nutrition today our bones will gradually become stronger. So, how can we accomplish this?

Well, for starters, we should consume more nutritionally dense foods. Purchase quality fruits and vegetables (which may mean buying organic, but may also mean locally-grown). Better yet, have a small garden, use all your kitchen scraps to make compost and grow some of your own nutritionally-dense produce.

Since that's not going to be enough, another good source of minerals is water. People around the world have sought out mineral springs for healing. Mineral water (that is, water with a high content of minerals) has a healing effect on the body because it provides the "dust of the earth" our bones and our bodies need in a form that can be assimilated.

A high quality colloidal mineral supplement is essentially artificially made mineral water. I find it interesting that Sally Fallon, in her book *Nourishing Traditions*, criticizes the use of colloidal mineral supplements and then basically recommends making your own by putting a good quality clay in water, stirring it up and then letting the clay settle and drinking the water off the top. That's basically how colloidal minerals are made.

One starts with a high quality clay from an ancient seabed that is loaded with minerals. When water leeches slowly across these deposits and comes out in a spring, you have a mineral spring. To make colloidal minerals, you simply mine the deposit and percolate water through the clay until you get a concentrated mineral water.

Studies show that people who drink mineral-rich water have healthier bones and teeth. Both Weston Price and Dr.

Bernard Jensen found that cultures that drank mineral rich water (such as glacial runoff) had better bones and healthier bodies.

Unfortunately, much of today's water is also contaminated with chemicals, so some kind of treatment or filtration is desirable to remove the contaminants. Unfortunately, this also removes many of the minerals. This is easily overcome by taking some Colloidal Minerals or Mineral Chi Tonic. One can also crush tablets of Trace Mineral Maintenance (which is the mineral rich clay colloidal minerals are made from) and put the crushed powder into a glass of water. Leave it overnight and drink the water (including the clay particles) the next morning.



### Herbs for the Bones

Herbal supplements are another great way to get trace minerals into the diet. Over the years, I have found mineral-rich herbs to be more effective at restoring tissue levels of minerals than any other approach I have taken. HSN-W is one of my favorite remedies here. It also happens to be one of Kim Balas' favorite remedies, too. We tend to oversimplify this remedy by thinking of it as a silica supplement, but it's much more than that. It contains herbs rich in calcium and other trace minerals, and is very good for joints, bones, connective tissue and the nervous system.

HSN-W was one of the primary remedies I put my mother on for her arthritis. I also gave her Joint Support (back then it was known as ART-A). I didn't give her a calcium supplement, just these herbal remedies. At age 82, she slipped on the stairs and fell, chipping a bone in her knee, which required surgery. The doctor said she had the bones of a 50-year-old. I assure you that this wasn't from taking calcium supplements. It was from taking herbs.

Herbal CA is another great remedy for strengthening the bones by providing readily available trace minerals. The ATC formula is especially valuable here, since the concentrating process tends to concentrate the minerals, too.

My favorite formula for trace minerals is a blend created by my midwife friend Joan Patton. She called it Herbal Calcium; I called it Herbal Minerals and talk about it in some of my courses. Several companies now make a version of it, but basically it contains alfalfa, nettles, oatstraw, horsetail and red raspberry. I've seen these herbs help build healthier teeth, joints, bones and connective tissue as well as improve people's overall health and immune system function. You can

easily blend these herbs and brew them into a tea as described in the article on oatstraw on page one or you can learn how to make them into a glycerite in my *Herbal Preparations and Applications* course.

So, what have we learned so far? Well, we've discussed that minerals are vital to health and that the bones are the mineral storehouse of the body. If mineral levels are low, then bones, joints and teeth will have problems, which will also relate to overall health problems due to a lack of minerals. We have also seen that nutritionally dense foods, mineral water (including colloidal minerals) and mineral rich herbs are the keys to rebuilding adequate mineral reserves.

### Getting Marrow in Your Bones

But, we're still missing one important factor as to why bone health is so vital to overall health. It's marrow, which takes us back to the beginning of this article. Marrow is the soft spongy tissue in the center of our bones. Bones are semi-hollow because a hollow structure is stronger than a solid structure of the same mass. However, the body doesn't ignore this space, it makes good use of it because marrow is the source of red and white blood cells. In other words, marrow helps build the blood. If one doesn't have healthy marrow, they can't have good health because they will be anemic and lack immune function.

So, here's another important way in which "marrow in the bones" is a symbol of good health. Recall that Dr. Price observed that people with strong bones and teeth were also resistant to infectious diseases.

Marrow is good food. Part of the reason dogs chew on bones is to crush them to get the marrow. We can get the benefits of marrow into the diet (and all the other nutrients needed for healthy bones and joints) by making broth. One of the most valuable pieces of information I acquired from Sally Fallon's *Nourishing Traditions* books was the information about making broth. It's something few people do anymore, but after reading about the benefits of broth, I began making it myself.

Traditionally, people didn't waste parts of the animals they killed for food. They ate internal organs (the brain, heart, liver and glands). They also threw pieces of bone and meat scraps into a pot with vegetables and made broth. Simmering the bones, joints, connective tissues, meat scraps and vegetables for several hours extracts all the minerals and nutrients needed to create healthy bones, joints and teeth.

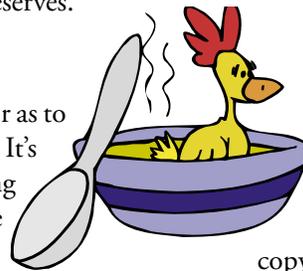
Broth also contains gelatin, glucosamine and other nutrients found in expensive supplements for arthritis.

Perhaps you've heard of using chicken soup for colds? Well, the chicken soup that works is one made with real chicken broth, which is made by simmering the whole chicken, bones and all, which extracts all that goodness from the bones, marrow and joints. This nutrient-rich liquid is not only good for your immune system, it's good for your bones, teeth, hair, skin, nails, muscles, nerves, digestion and liver, too.

Broth isn't hard to make. Put your bones and meat scraps in a large pot of cold water with some vegetables like onions, celery and carrots, cut into large pieces. Add 1/4 to 1/2 cup of vinegar and let it soak for about one hour. Then bring the whole mixture to a boil. Reduce the heat to a simmer and simmer the mixture for 8-12 hours. Strain off the broth, pick out the meat and throw everything else away. For more precise directions, get a copy of *Nourishing Traditions* or go online to <http://www.westonaprice.org/foodfeatures/broth.html>.

I start making my broth in the evening and let it simmer overnight, then pick out the meat and strain the broth in the morning. It's really interesting to examine the bones of a chicken you've cooked in this way. You can actually crush the small bones and the ends of the large bones because they are so soft. This is because the minerals have been leached out of the bones and are now suspended in this lovely liquid that makes an excellent base for soups. If you want the best supplement you can get for your bones and joints, make broth once a week and use it throughout the week.

I hope you have a new appreciation for the importance of healthy bones to a healthy life and a better understanding of what you need to do to keep your bones strong. May you have health in your navel and marrow in your bones, so you can live a long, healthy and happy life.



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## Kimberly Balas' Clinician's Corner

# Calcium and Osteoporosis

*Q. Are calcium supplements really all that helpful in preventing osteoporosis? If not, what is helpful for preventing osteoporosis.*

There is a lot more to keeping bones healthy than just taking calcium supplements. To understand why, here is some information about how calcium is used in the body.

Normal bone is constantly being remodeled. There is a revolving mechanism between the calcium held in the bones and the serum calcium found in the blood. Calcium can shift out of the bone and into the blood as well as out of the blood and into the bone.

Under healthy conditions, bone calcium normally remains fairly consistent. Calcium is deposited on the bone and reabsorbed back into the blood at similar rates. However, when blood serum calcium levels are constantly low, the body reabsorbs calcium into the blood faster than it can be deposited back into the bone. This results in a loss of bone mass.

Another important factor to consider is that the calcium in the blood is found in two forms, free calcium and bound calcium. If there is an excess of free calcium, then calcium will not be absorbed back into the bones. Too much free calcium can cause kidney stones, bone spurs, gallstones and even arterial plaque.

A high free calcium index indicates a reduction in the level of organic anions. This is associated with acid conditions and a tendency towards anaerobic metabolism. When the free calcium is high, the urine will actually be overly acid. With a high free calcium index, calcium will show normal in the blood. However, there will be an increased tendency towards calculus formation on teeth, calcifications within the body like stones and bone spurs, bone loss and chronic disease.

By increasing magnesium in the diet, the unbound calcium can actually be used. Magnesium raises serum phosphorus, which reduces the level of calcium that can be used.

Excess sugar consumption depresses phosphorus levels and causes a corresponding rise in free calcium. This happens because of how sugar affects the glands. Sugar raises levels of the parathyroid hormone, which causes urinary excretion of phosphorus and magnesium, which is needed to bind calcium into bone. So just eating a lot of sugar contributes to osteoporosis and eliminating sugar can help increase bone density.

Our internal biochemistry will not tolerate a deficiency even for short periods. This is why a deficiency of calcium or a difficulty of calcium absorption, even for short periods of time, can result in a significant percentage of bone loss.

Unfortunately, bone calcium is very alkaline and is difficult for the body to properly acidify and transport for other biochemical functions. Calcium reabsorbed from the bone must circulate in the blood for long periods of time in an attempt to become acidic enough for use. This explains why those who are calcium deficient often show high levels of calcium in their blood.

Hormone therapy with estrogen and progesterone might be able to delay the onset of osteoporosis. Using bioidentical estrogen can help alleviate osteoporosis. In the February, 1989 issue of *Let's Live* magazine, Dr. David Steenblock wrote, "A lack of estrogen in post-menopausal women prevents the absorption and utilization of calcium and is the single most important factor in the development of osteoporosis in older women."

We can take this one step further and apply it to males. As men age, their testosterone levels can decrease. Testosterone is converted to estrogen in the male and it serves the same function as in women. A lowering of testosterone contributes to osteoporosis in men, as well.

Many factors influence calcium absorption. Among them are exercise, overall nutrition and the pH balance of the gastrointestinal tract. Effective calcium absorption begins in the stomach. If the stomach produces too little stomach acid (hydrochloric acid) or a person is neutralizing their acid with antacids, calcium remains insoluble and cannot be ionized and assimilated. The proper level of hydrochloric acid in the stomach is so important that its lack in the digestive process can account for as much as 80 percent loss of available calcium absorption.

Deficiencies of a number of different nutrients over a long period of time may accelerate bone loss. This concept was illustrated in a 1981 clinical study that showed adding certain micronutrients to a calcium supplement reduced bone loss by a significantly greater degree than calcium alone. This is why you should never fragment nutrition by taking just one or a few isolated nutrients in the total absence of others.

Kimberly Balas is a board certified naturopath and clinical nutritionist. She is currently head of the research department and a certified instructor for all Tree of Light courses. She is available for consultations by phone or at her Wyoming office. For more information on scheduling a consult, please phone 307-277-2466.



# Don't Let Osteoporosis or Arthritis Get You Down

## Learn to Be Good to the Bone



“Bad to the Bone” may be a good line for a song, but if you want to have great health you’d better be “Good to the Bone.” Brittle bones, painful and stiff joints and other bone problems aren’t just isolated health issues. They are signs of deeper imbalances because the bones do much more than just structurally support the body.

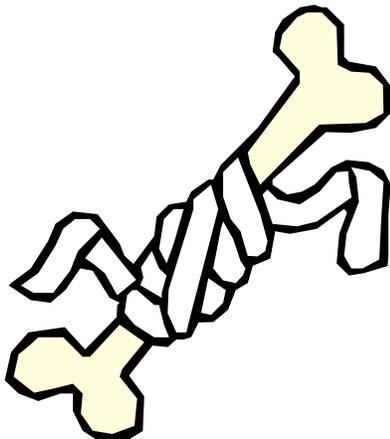
Besides protecting important organs from damage and manufacturing both red and white blood cells in their marrow, bones are also the body’s primary storehouse of minerals. So having bone and joint problems (like arthritis or osteoporosis) is a sign of a mineral-deficient diet. But don’t think that

taking calcium supplements is going to solve this problem, because it won’t.

In this month’s Herbal Hour, Steven Horne, RH(AHG) shares with you why you’re probably wasting your money on those calcium supplements (assuming you, like millions of other Americans are actually taking them). He’ll also explain to you the four keys to maintaining healthy bones and how to work with specific bone problems like osteoporosis, arthritis, calcification, bone spurs and broken bones.

If you want to be good to the bone, purchase this month’s Herbal Hour and start building a strong foundation for your health.

Learn the keys to healing bone problems like arthritis and osteoporosis with this month’s Herbal Hour DVD



### **Good to the Bone DVD**

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