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OSTEOPOROSIS -- THE PREVENTABLE DISEASE

A SYSTEMIC HERBOLOGY APPROACH TO MENOPAUSE

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[Notes for practitioners, but available to all. The programming information refers to Systemic Formulas. See www.jacktips.com and the "Health Professionals" section for more information on these amazing natural healers.]

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THE OSTEOPOROSIS MYTHS

Each year there are 1.3 million bone fractures due to people's bones becoming brittle. And even more alarming, many people die from bone fractures as other complications, such as pneumonia, develop. Statistics show that 20% of the people who suffer osteoporotic hip fractures die within three months. These facts are certainly no myth. Osteoporosis, the disease of weak, brittle bones, is certainly no myth.

So what are the osteoporosis myths? Well, unfortunately there are quite a few. Some are promoted by "medicine" to get people to buy estrogen replacement; some are by the dairy association to get people to buy milk; and some are by health-food-supplement manufacturers to get people to buy calcium supplements. So, if you are weary of people trying to sell you something with misleading and incomplete information, take a few moments to read this material and understand what osteoporosis is, how it is prevented, and how it is healed.

And that last statement about reversing osteoporosis and rebuilding depleted bone mass contradicts a major osteoporosis myth by claiming to know what osteoporosis really is, how to prevent it naturally, and how to rebuild brittle bones if osteoporosis already exists.

Before we jump into all the myths and ways we have been misled by medicine, dieticians, antacid manufacturers, and nutritional supplement companies, let's first take a fresh look at osteoporosis and become familiar with the many factors that contribute to it and ways to prevent it. Then we'll be in a position to quickly see through the myths and know what to do to protect our health.

WHAT IS OSTEOPOROSIS?

Osteoporosis is a disease, mostly of the elderly, whereby they lose bone mass resulting in brittle, mineral-depleted, weak bones that can easily break. Osteoporosis is characterized by the stooped, shriveled posture that results from the weight of the person on the depleted bone structure. Sometimes this stooped posture is called a

"dowager's hump" as the spine compresses. People can literally lose 9 inches of their former height as osteoporosis settles their bones toward the ground due to gravity.

On a biochemical level, osteoporosis is an imbalance in the activity of two types of bone cells -- the osteoclasts and the osteoblasts -- which are responsible for releasing calcium into the bloodstream or accepting calcium into the bones respectively. Later in this discourse we will more closely examine the biochemical processes of osteoporosis.

WHO GETS OSTEOPOROSIS?

Both men and women can get osteoporosis, but it effects more women because many women today do not have the ability to properly adjust to menopause and compensate the body's estrogen and progesterone levels. If the women's body does not properly adapt to menopause, then the low estrogen levels predisposes her to accelerated calcium loss and the low progesterone predisposes her to low re-absorption of calcium into the bones. The loss of calcium from the bones leaves weak and brittle bones or osteoporosis.

THE OSTEOPOROSIS EQUATION

Would you believe that, according to medicine, the official cause of osteoporosis is "UNKNOWN"?

Now, if you've been around the natural health field just a little while, you'll already know that when medicine labels the cause of a disease as "unknown" that's the same as saying the cause is NUTRITIONAL, or possibly environmental (such as from pesticides or chemical pollutants), or possibly iatrogenic (a disease caused by vaccinations and drugs recommended by doctors). Or a combination of all three.

But quite often it is nutritional in that nutrition is a major factor in the body's pH, and pH predisposes the effectiveness of the body's chemistry. Such is the case of the unknown causes of PMS, Alzheimer's, inability to smoothly adapt to menopause, Chronic Fatigue Syndrome and many other illnesses. If the cause is unknown, or if the malady is a "syndrome", then you can be sure it is the result of the body's inability to adapt to its improper nutritional intake, its environment, or the drugs put in the system.

So, let's take a look at the mineral Calcium since it is the most measurable loss from the bones in osteoporosis. Calcium is the most abundant mineral in bones, followed by phosphorus, magnesium, manganese, boron, strontium, silica, zinc, and copper. The bones hold 99% of the body's calcium and serve as a calcium reservoir from which withdrawals and deposits are made to constantly maintain essential serum calcium levels in the bloodstream.

Calcium is obtained from our diet. The best sources of calcium are green, leafy vegetables and fruit. Milk, as it is presented to the public for consumption, is not a good source of calcium and is not a good food. [Milk as a detrimental food and poor source of calcium is explained in more detail in *The Pro-Vita! Plan For Optimal Nutrition*, (Tips 1992).] A proper diet, such as The Pro-Vita Plan, provides 100% of the body's calcium requirements. The conventional dietician's recommendations of 1500 mg a day is based on conventional medical research which comes from outdated researched based on people with excessively high protein diets.

Calcium is absorbed, utilized in numerous metabolic functions, and may be excreted. Thus Calcium activity is a dynamic system. There is an ebb and flow. It can be taken from one area of the body and put into another, then be put back again. It can be used to

maintain the pH (acid/alkaline balance) of the blood and discarded as a buffer to acids. It is needed by the digestive system and by the muscles including the heart.

So there is a Calcium Balance or a proper intake, utilization, storage and/or excretion of the mineral. With any dynamic system, there is an equilibrium, balance state, or hub around which the give and take occurs.

The key to avoiding osteoporosis is to stay on the positive side of the Calcium Balance. Let's look at a scenario.

For example: A person's dietary intake of calcium is 1200 milligrams. This comes from scrambled eggs, a leafy salad, a glass of spring water, milk used in a sauce, a Tums used after lunch, and some bread. Of this 1200 milligrams, the person absorbs 200 milligrams of bioavailable calcium into the body.

[Now, you might wonder why only 200 milligrams got absorbed, so we'll have to look at some of the factors of calcium absorption and the different bioavailability of different kinds of calcium. In our example there are good calciums and detrimental calciums. But if we explain this now, we'll lose sight of our calcium balance scenario.]

Now, during the day, this person used 190 milligrams of calcium in metabolic processes, primarily to buffer acids in the bloodstream both from dietary intake and metabolic by-products. So, this person is in a positive calcium balance. 200 milligrams was taken in and only 190 used, leaving a little left over. With ample calcium available to meet all the body's demands, there is no need for the body to take calcium from the bones for use in other areas. Thus osteoporosis is not occurring.

But, in another scenario, a person ate a diet high in acids such as a big, juicy steak. The body took in 200 milligrams of calcium that day, but used 210 milligrams to buffer the acids, by-products of the meat, to maintain proper pH in the blood. Without enough calcium absorbed from the diet, the body took some from the bones. In this case, the body took 10 milligrams from the bones. Thus there is a negative calcium balance and the person has moved a slight step toward osteoporosis unless the body can replenish the calcium taken from the bones.

So, an obvious analogy is that of a bank account. If you continue to take out more than you put in, eventually you run out. When the body runs out of proper calcium in the bones, then osteoporosis results.

Now our scenario is a bit simple in that there are some other factors involved in bone mass such as other minerals (magnesium, phosphorus, boron, silica, etc.), and there are metabolic life cycles of building bone mass prior to age 30, but our simple scenario is holds true. And there is a balanced system between the thyroid, parathyroid, and kidneys in controlling calcium metabolism. But still, if you use more calcium than you take in, you will end up short.

This is the **Osteoporosis Equation:**

$$\begin{aligned} & \text{Calcium absorbed} \\ - & \text{Calcium excreted} \\ = & \text{Calcium balance (+ or -)} \end{aligned}$$

Maintain calcium balance at neutral or a little better, and you maintain calcium health. Lose calcium and you overdraw.

Now that we've got the Osteoporosis Equation, let's examine a myth, then we'll look further at types of calcium which will also expose some myths.

MYTH #1. ONCE YOUR BODY ENTERS A PHASE OF REDUCED ABILITY TO BUILD BONE MASS, THEN YOU CANNOT BUILD BONE MASS.

This means, according to medicine, you can't build bone mass when you're old, but this simply isn't true!

Medical science has logged a bell-curve of bone mass across the span of many people's lives and can show us that in childhood and early adulthood, people's bodies build bone mass at a rate greater than they deplete it. Then, sometime in the mid-30's, the body stops building bone mass as much as before and starts spending its accumulated wealth of calcium resulting in gradual bone loss over the rest of the person's life. So, in the medical model, we all grow old, shrink, get brittle bones, and die.

So the picture they often give us is, "you better drink lots of milk while you're young to build strong bones, so you have a good bank account of calcium to spend when you are old, because you won't have the ability to build your bones when you're old."

This may well be the case with some people, particularly if they exhaust their glands and organs ability to function properly, but it's not the law according to Nature. And although we have a second myth involved which is that milk builds strong bones, we'll stay focused on this linear portrayal of the calcium bank account.

Now we should know that nothing in health is linear. Everything is cyclical and dynamic. If the body can take calcium from the bones and put it back, which is exactly what it does everyday, why can't we encourage it to put some back even when we are 40 or 50 or 80 years old? Well, of course we can.

What we really have to address is what is required to get calcium back in the bones. What kind or kinds of calcium can do this? What do the kidney's do? What do the parathyroid and thyroid glands do? What is the role of Vitamin D₃? What enzymes are required? What do the hormones estrogen--and more importantly progesterone--do? What is the best pH for accomplishing reintroduction of calcium to the bones? These are certainly not insurmountable questions, in light of nutritional knowledge today. And, as with many things with Nature, after we examine all the parts, the solution is very basic and simple.

There exists today ample scientific evidence from nutritional researchers that clearly shows calcium can be absorbed into the bones of people with osteoporosis, without the use of estrogen replacement, resulting in better bone density. This has been carefully documented with x-ray portraits and promoted by companies favoring calcium supplementation in the hydroxyapatite (bone ash) form.

But it isn't done by adhering to the lifestyle that caused Osteoporosis in the first place. And this is probably Medicine's problem. Since they do not acknowledge nutrition as an important factor in health, they see the people continue eating the same diet that caused osteoporosis and wonder why they can't get calcium back into their bones.

So let's dispel the myth that we can't get calcium back into our bones when we are elderly. Let's refute the myth that we have to have brittle bones when we are 100 years old. We can get calcium into the bones because it is Nature's design. We can have

strong bones when we are elderly because Nature did not predestine human beings to have weak bones.

Thus, those who have osteoporosis, have not lived in accord with Natural Law meaning that the diet was not suitable for the individual's body; or that the individual did not make necessary dietary adjustments to overcome their tendency to osteoporosis, or the person took medications that caused depletion of the calcium reserves, or the person endured circumstances that caused an osteoporotic pattern to become implanted. It is not in Nature's design that our bones fall apart. This is indeed a trend in modern society, but it's only a symptom of being estranged from the natural foods and natural lifestyle that builds and maintains health.

That's really all there is to it. The body responds PERFECTLY to the stimuli given. If we give it the stimuli to develop osteoporosis, then it perfectly will develop. If we don't like the results in our health, then we must change the stimuli. Our bodies already have a system to maintain bone density. All we have to do is use the system that's already there and not block that system or cause the calcium-depleting system to be active all the time.

And that's what we'll look at next: the many causes of Osteoporosis.

CAUSES OF OSTEOPOROSIS (OTHER THAN MEDICINE'S OFFICIAL "UNKNOWN")

1. EXCESSIVELY HIGH PROTEIN DIET WITHOUT BUFFERING VEGETABLES is suspect, but it is a myth that red meat causes osteoporosis. Most proteins turn to acid in the body. The exceptions include poached eggs (other forms of eggs are acid), sprouts, soy products, seeds, nuts, fish, and cottage cheese. Also included as a protein-acidifier food is red meat especially when it is eaten without proper vegetable buffers. The uric acid and other acids and metabolic waste products in red meat can push the blood chemistry to the acid side, even though the meat contains abundant calcium.

To counter any excessively acidic intake, the body quickly buffers with calcium because a constant pH of the blood is essential for life. The body will readily pull calcium from the bones to meet this demand. So, a 12 ounce steak eaten without raw and lightly cooked vegetables can temporarily draw upon the calcium reserves if the inherent acids are greater than the calcium and other alkaline salts. So here is where many people start their trend toward osteoporosis---with too much and too frequent use of acid foods including commercial red meat without the buffering vegetables in the meal.

Studies are often cited that blame red meat for loss of calcium, yet the participants did not use red meat in their diet-studies. Instead they used free form amino acids which are metabolically quite different. When the studies were done with people using red meat in moderate portions with accompanying vegetables there was no significant calcium loss. This is presented here because of the blatant mis-use of the studies by people trying to force a vegetarian diet on others. The conclusions were that an excessively high amino acid diet causes calcium depletion; not that red meat in the diet depletes calcium.

There is also documentation that people can live in arctic climates for years on strictly red meat from elk and not suffer any osteoporosis. Yet, Eskimos have the highest osteoporosis rate. They also have high consumption of meat without vegetables because vegetables do not have an adequate growing season in the arctic environment. However, before the Eskimos adopted a "civilized" diet of white bread, white sugar, alcohol, tobacco, and post-industrial revolution processed foods, osteoporosis was not a big concern. Thus, rather than blame the meat which was their indigenous diet, we

should be looking at excessive and refined carbohydrate foods as the newly introduced element that disrupts the body chemistry and calcium balance.

A parallel statistic is that the countries with the highest intake of milk also have the highest numbers of osteoporotic people, thus we have to suspect that we are not being told the truth when the milk lobby and dieticians tell us that drinking milk prevents osteoporosis. This topic will be examined in greater detail later in this discourse and in great detail in the article entitled "True Milk" available at www.jacktips.com.

The Pro-Vita! Plan for Optimal Nutrition (Tips, 1992) presents a method on how to balance, maximize, and buffer proteins to maintain a healthy pH and a healthy body. It is an ideal osteoporosis prevention diet that presents both vegetarian and non-vegetarian options.

2. SMOKING. Nicotine binds the hormones that calcium needs to be utilized. Thus smoking inhibits the effectiveness of calcium and makes it necessary for the body to use more calcium to maintain homeostasis of the blood. Smokers use and lose more calcium than non-smokers. Statistics show that smokers are more prone to develop osteoporosis than non-smokers.

3. ALCOHOL. Depletes calcium. Urinary excretion of calcium soars when alcohol is used.

4. ALUMINUM. Depletes calcium. Sources of aluminum in many people's lives include: Antiperspirants, beer and soda cans, baking powder, ant-acids, TV dinners, foods cooked in aluminum cookware, fruit juices sold in cardboard or aluminum-lined pouches, etc.

5. SODA POP. All the popular soft drinks contain phosphoric acid, and phosphoric acid depletes calcium. Phosphoric acid is toxic to the body. Its many side effects can be found in the *Materia Medica* which lists the mental, emotional, and physical effects of an excessive intake of phosphoric acid. Calcium is used to neutralize this toxic acid and is then excreted from the body. Soda pop is a major depletor of calcium both through the phosphoric acid and horrendous amounts of refined sugar.

6. MENOPAUSE, ESTROGEN / PROGESTERONE DECLINE, HYSTERECTOMY. After menopause, or after premature menopause inflicted by complete hysterectomy (ovaries removed), the body enters a lower estrogen/progesterone phase. Since bone cells are influenced by estrogen as are breast tissue and reproductive organs, when there is lower estrogen, and more importantly lower progesterone, there is lower activity with those cells. This can result in bone loss.

At menopause, a woman's adrenal glands should ensure that adequate estrogen is made for the body, enough to avoid adverse symptoms such as bone loss. If a woman is well-nourished (*Pro-Vita! Plan for Optimal Nutrition*) and has balanced body chemistry, then the adrenals maintain estrogen for bone health, and estrogen replacement is not necessary, and is actually detrimental. Unfortunately, many women have weak adrenals which do not produce enough estrogen. Thus they are ill equipped to maintain good bone health.

Fortunately, there are herbal formulas to help build the adrenals, and help the body with phytoestrogens, estrogen and progesterone precursors, and *adaptagenic* factors to help maintain a post-menopausal estrogen/progesterone supply for bone integrity.

Homeopathy has proven its methods very effective for helping the body maintain its bone integrity after menopause.

7. ABNORMAL PARATHYROID FUNCTION. The tiny parathyroid glands secrete a hormone, *parathormone*, that mobilizes calcium from the bone to the bloodstream. Parathormone also causes the kidneys to conserve blood calcium, and it also influences the absorption of calcium from the intestine by its involvement with Vitamin D₃. So, there's a system here involving five areas -- parathyroids, bones, kidneys, blood, and intestines -- in a series of feedback loops based on calcium concentration which inhibits the secretion of parathormone. A dysfunction or weak link, an over secretion of hormones, or a problem anywhere in this system can cause a loss of calcium and depletion from the bone.

8. ABNORMAL THYROID FUNCTION. The thyroid gland, in addition to several other hormones and functions, secretes a hormone called, *calcitonin*. This substance helps regulate calcium by inhibiting the rate at which it leaves the bone. Thus it can act in opposition to the parathyroid glands and thus prevent severe bone loss. Calcitonin also increases the rate which calcium is deposited into the bone matrix by stimulating the osteoblast cells and by inhibiting the osteoclast cells that release calcium from the bone to the blood. It also increases the excretion of calcium by the kidneys. So, if a person ingests too much calcium in a meal or supplement, this is the method the body uses to prevent too much calcium in the blood and thus maintains its calcium balance. So, it only stands to reason, that abnormal thyroid function could tip the complex homeostatic system toward excessive calcium excretion. When medicine surgically cuts out thyroids as a "cure" for hyperthyroidism, they only replace the hormone *thyroxin* synthetically, and usually try to help the calcium situation with estrogen replacement. Then if endometrial cancer develops from the estrogen, they can detect it early and "cure" it with a hysterectomy.

Abnormal thyroid function, or low thyroidism which is thought to affect 90% of our population, can set a trend toward gradual bone loss.

9. WEAK KIDNEY FUNCTION. The kidneys serve to prevent Osteoporosis two ways. They manufacture vitamin D₃ which is necessary to assimilate and utilize calcium, and they remove metabolic acids from the blood. If they are weak, there is less absorption and utilization of calcium resulting in greater removal of calcium from the bone for daily metabolism management. Also, if the kidneys are slow to remove acids from the blood stream, then the acids stay longer in the blood requiring calcium to neutralize them. Good kidney function is essential to proper calcium metabolism, and careful use of the body's calcium resources.

10. CORTISONE. Forces urinary excretion of Calcium. It also weakens the adrenal glands so they will be less prepared to take over with female hormones at menopause. Frequent or prolonged use of cortisone (Prednisone™) and other corticoids predisposes a person to osteoporosis.

11. ANTIBIOTICS. Although they are not needed 90% of the time, they are prescribed in alarmingly excessive amounts. Once thought to be the "silver bullet" to solve all humanity's health problems, antibiotics have caused profound damage to people's health. We'll not take time here to discuss the immune-inhibiting effects and the damage to the beneficial intestinal flora. This topic is discussed at greater length in *Conquer Candida and Restore Your Immune System* (Tips 1989). One of the more minor damages is that antibiotics deplete calcium through urinary excretion. Now one or two courses over a lifetime will not cause osteoporosis. The concern with osteoporosis is that

sometimes people are put on antibiotics for years! Acne, Lyme's, Crohn's, Sinusitis, even Pelvic Inflammatory Disease can cause doctors to keep the antibiotics going for extended, long terms. There is so much indiscriminate use of antibiotics, people really have to be careful. Dentists routinely give them. They end up in meat on people's dinner tables since they are given to the cows throughout their lives. Add a few prescriptions due to colds (we all know antibiotics won't help colds, but doctors prescribe them anyway in case there might be a secondary infection), and a sore throat or two, and some people have 10 or 15 courses in a year! If a person has illnesses for which doctors often prescribe antibiotics more than once every few years, it is a symptom that the body is not functioning properly and a strong hint to seek out a natural health practitioner such as an herbalist or homeopath.

12. COFFEE. Yep. It causes calcium to be excreted. Thus it contributes to bone depletion. It's not just the caffeine that causes calcium loss, but the coffee itself. Decaffeinated coffee is an improvement regarding calcium loss but not a perfect solution. Since the coffee bean is roasted, it contains toxic tars and altered oils. Occasional use of coffee is not a severe issue, but daily use becomes a health issue.

12. LACK OF EXERCISE. Most people have heard that the first astronauts, on their return from space, suffered considerable bone loss. This was due to weightlessness and the lack of exercise. If there is not a stress on the bones by the muscles, the body does not endeavor to build strong bones. If there is stress, exercise and weight-bearing activity on the bones, then the body makes sure they are strong. So, if you don't use it, you lose it. Sedentary people's bodies do not need strong bones, so the body doesn't build them. Tell your body you need strong bones by exercising.

14. OTHER CAUSES—SUGAR, FLUORIDE, CHLORINE, STRESS. There are other causes, but time doesn't allow a full discussion on chlorine and fluoride in the water supply. The fluoride is supposed to make bones strong, but, in its inorganic form used in public water, it causes brittleness of the bones. We could also build a case against sugar, and of course, STRESS causes calcium to be depleted because it is used to buffer all the stress-induced metabolic acids. Thus, it is typical for a nutritionist to recommend a calcium supplement, as well as numerous other vitamins and minerals, for people under excessive stress.

HERBAL ALTERNATIVES

Many of the causes of Osteoporosis are lifestyle factors. The human body simply wasn't made to accommodate significant amounts of alcohol, tobacco (nicotine), coffee (caffeine), sodas (phosphoric acid), or high acid diets (lack of vegetables). It wasn't made to accommodate aluminum in the arm pits daily. It wasn't made to have to deal with the thousands of environmental pollutants in our food, water, and air supply. It wasn't made to have to adapt to the numerous side effects of prescription medicines.

It's grim, but not so grim as to not have some viable answers to these causes. Dr. Wheelwright designed a superb calcium supplement, **CAL**, with nine sources of calcium, vitamin D₃, boron, Hydrochloric Acid (help calcium become assimilated), all in an herbal matrix. It has proven very effective in helping people with calcium deficiencies (negative calcium balance).

He also has an herbal formula called **Gf** (Thyroid) designed to balance the Thyroid / Parathyroid functions. His **Ga** (Adrenal) research and resulting herbal formula helps maintain strong, healthy adrenals. And his herbal anti-infective formulas - **GOLD**

(Defense Plus), #3 (Anti-Infective), and VIVI (Anti-Viro) provide safe and effective alternatives to the severe drugs often used for various infections. His F+ (Female Plus) formula is an adaptogen for proper estrogen/progesterone balance. We are very fortunate to have such viable herbal and homeopathic systems of maintaining health, and thus preserve us from the many detrimental influences in the world.

Using Wheelwright's Systemic Formulas, (see the Health Professional section at www.jacktips.com) health professionals can easily design a nutritional program to help people prevent osteoporosis; and with a little more attention to detail, design programs to help people rebuild their bone density. The formula codes refer to Systemic Herbal Formulas designed by Doc Wheelwright.

BASIC OSTEOPOROSIS PROGRAM FOR WOMEN

3 F+ upon arising
2 CAL with breakfast and supper.
2 MIN with lunch

BASIC OSTEOPOROSIS PROGRAM FOR WOMEN WITH GLANDULAR FATIGUE OR HISTORY OF BIRTH CONTROL PILL USE

3 F+ upon arising
2 CAL, 2 Ga (Adrenal) with breakfast
2 MIN, 2 Gf (Thyroid) with lunch
2 CAL with supper

MYTH #2. ESTROGEN REPLACEMENT THERAPY IS NECESSARY TO PREVENT PREMATURE AGING, BREAST SAGGING, WRINKLES, AND BONE LOSS.
[Perpetuated by medicine.]

There is a natural plan for the female body, and if it is taken care of, then premature aging, wrinkles, and bone loss are not a natural part of menopause. The adrenal glands and the fat tissue can provide estrogen for proper bone maintenance after the ovaries quit producing. With the effectiveness of both homeopathy and herbal therapies to assist the post-menopausal body, Mother Nature never planned for medicine to bail her out of what medicine considers her obvious shortsightedness, and provide estrogen after the body decides its time to stop ovulation and menstruation.

A healthy, vital woman who exercises, eats a proper Pro-Vita! diet, gets adequate rest and recreation, is not a likely candidate for post-menopausal problems.

Unfortunately, women today are often loaded with immunizations, antibiotics, cortisone, and various other drugs; living on improper, refined diets; experiencing unnatural amounts of stress, and living in toxic environments. With the adrenal and thyroid glands worn out and nutritional imbalances the rule, of course it's a difficult challenge for the body to move into menopause with ease and grace. So, for all the sick, imbalanced, and unnatural lifestyles, medicine has a way to prolong youth in spite of it all.

Of course, it comes with a price. Estrogen replacement has a few side effects such as cancer and bleeding. Even with progestin added to balance out the side effects of estrogen, there is still an increased chance of cancer.

But, since we live in world where the air is filled with atomic radiation, the ozone is thin, the air contains carcinogens, the food contains pesticides and carcinogenic chemicals, TV sets emit electromagnetic disturbances, the water is filled with chemicals and carcinogenic substances; what's just one more little added risk of getting cancer? Besides, insurance pays for it, but they sure won't pay for a vitamin, mineral, herb, or homeopathic therapy to prevent cancer.

If you choose to participate with the millions of people being lead like sheep from health myth to health myth with blind trust in medicine, then you want to choose estrogen replacement. You'll probably need it.

But, if you choose a natural life, one built on vitality and health, then you probably won't need estrogen replacement.

MYTH #3. DRINK MILK FOR YOUR CALCIUM TO BUILD STRONG BONES.
[Perpetuated by the Dairy Associations, Endorsed by Medicine.]

Whether or not a person should drink milk is a subject of much discussion. Many nutritionists strongly oppose the use of milk for numerous reasons. Yet, we hear on the television that milk is a "health kick". Let's examine some facts and understand the concerns because, generally speaking, commercial milk is not fit to drink and not a good food for most people. Although there may be some people who do well with milk, when we examine what the grocery stores sell as milk, it's hard to think of it as a good food.

First, let's figure out what milk is. From a natural health perspective, milk would have to be in its natural form. Thus, it would originate from a human breast from a woman free of drugs and on a healthy diet. Since breast milk is not used as a food for people other than infants, we then must look to the animals that produce an abundance of milk--cows and goats.

From the natural health perspective we say that milk derives from a cow or goat in its natural state. Should we find such an animal that is fed a healthy diet and kept free of pesticides, growth hormones and antibiotics, we would have a sample of whole, raw milk. This milk would most likely be a superior food, particularly for the offspring of that animal.

An assay of the raw milk from a certified, organically-raised animal would show that it contains an abundance of vitamins, minerals, fatty acids and other nutrients. It would contain fewer bacteria than the pasteurized milk people buy at the grocery store. This is MILK! It is most likely a good food for many people, if they wish to continue using milk after weaning. We've defined milk to be a product as it is found naturally. But this natural product is certainly not what people are calling, or buying as, "milk" in the stores.

We know about the commercial product that it's pasteurized which is a process of heating the milk to around 150 degrees Fahrenheit for 30 minutes. A newer method of pasteurization heats the milk to around 170 degrees for about a half a minute killing some of the bacteria in the milk to reduce the chance for infectious disease.

However, it takes a temperature of around 190 degrees Fahrenheit to kill the bacteria causing typhoid, tuberculosis and b-coli. Although pasteurization does kill some of the streptococcus, it also kills the beneficial lactobacillus acidophilus. In this way the milk loses its inherent germicidal control and soon contains many more bacteria than if it were left in its raw state.

If raw milk is left to stand, it clabbers or turns into curds. As long as the acidophilus is present, it inhibits the harmful, putrefactive bacteria and the milk turns to curds. But if pasteurized milk is left to stand, it rots since pasteurization leaves the milk unprotected and the putrefactive bacteria reign. If you drink pasteurized milk and your body does not have the ability to digest it properly, you end up with bacteria-laden, rotten milk in the bowel.

Dr. Royal Lee found many cases of undulant fever in consumers of pasteurized milk. There are also many cases of salmonella poisoning from pasteurized milk. We need to know that pasteurization does not really protect us completely and that it harms the nutritional value of milk.

Why is milk pasteurized? Like so many detrimental things that have happened to our food, it is primarily done as a convenience for the dairy and the grocer. If the milk is cleaned up by the heat of pasteurization, then only lowered sanitation standards are necessary. For this reason, the certified, raw milk dairies are so meticulously clean and much cleaner than the commercial dairies, and raw milk has a lower bacteria count than commercial milk. Also, if raw milk starts to spoil or curdle, it smells bad and warns the consumer. However, pasteurized milk takes longer to give off a bad smell since it does not have an active curdling potential (enzymes and bacteria), thus has a longer shelf life.

Much nutrition is lost to pasteurization because heat kills enzymes. In the case of milk, the enzymes killed by pasteurization are the very enzymes needed to assimilate the calcium and properly digest the milk. We hear a lot of advertising hype about milk supplying calcium. How can it supply calcium when in fact pasteurization kills the enzymes needed to assimilate it? It is noteworthy that the U.S. ranks in the top ten countries in the world in drinking pasteurized milk and also ranks in the top ten for calcium deficiency diseases.

There is much vitamin loss due to pasteurization. Over two thirds of milk's inherent vitamin E and vitamin A are lost as well as large amounts of the vitamins C and B. Then synthetic vitamin D is put back into the milk to fortify it. Along with the vitamin loss, there is significant mineral loss. The heat also causes the minerals to form ionic bonds, meaning the body cannot break the bond to use the element or mineral.

Since fats are sensitive to heat and should not be heated, pasteurization alters the milk's fat molecules. Pasteurization also damages the proteins, and milk is a protein food.

Clearly, pasteurized milk is a commercially damaged product. What that damage really means can be seen when calves die after they are fed pasteurized milk. In fact, calves die in two months or less on pasteurized milk! It raises the question why we use pasteurized milk to feed babies.

People keep giving commercial milk to their children after weaning them because they are concerned about a calcium source for them later. But commercial milk is not a good source of calcium for several reasons. Milk alkalizes, yet calcium is absorbed only in an acid medium. The enzymes needed to assimilate calcium are destroyed by pasteurization. The heat of pasteurization hardens the calcium molecularly, making it very difficult to break it down. The natural vitamin D is replaced with synthetic vitamin D which makes it more difficult to assimilate calcium. The best source of calcium for human infants is breast milk. If the mother can't nurse, a wet nurse should be provided. If that's not possible, raw goat milk should be used. The best source of calcium for humans after

weaning is in green leafy vegetables, carrots, cabbage, bok choy and Chinese cabbage. If you are really worried about calcium, put some lemon juice on an egg shell overnight and drink the juice which will be calcium citrate.

The most famous research on the ill effects of pasteurized milk on children's teeth, animals and calves was conducted by Dr. Frances M. Pottenger and formally presented in 1945 at the Second Annual Seminar for the Study and Practice of Dental Medicine. The research established that raw foods sustain health and prevent disease, but pasteurized and processed foods ruin health and cause disease.

However, pasteurization is only part of the damage done to the white liquid people buy as milk. Homogenization, another processing of the milk, is done so the consumer will not have to contend with the cream separating to the top of the milk. Homogenization breaks down the fat globules so the milk is all mixed with the cream and won't separate. This process produces a root cause of coronary heart disease since the tiny fat globules of heat-altered, denatured milk are able to enter the blood stream without being properly digested. People who drink milk have the tiny fat globules floating around in their bloodstreams where they can be deposited in the arteries. Furthermore, the heat-altered lipids may well cause auto-immune reactions. According to Dr. Emanuel Revici, abnormal lipids are part of the process of cancer.

It is alright to drink raw milk from a healthy, organically-raised nanny goat or cow. Their milk is probably a very good food, provided the individual is able to properly digest it. There have been clinics around the world that have treated many diseases with raw milk. Years ago, sanitariums treated tuberculosis and gastro-intestinal disorders effectively with whole milk. But the pasteurized, homogenized, commercial milk from the American Dairy Association dairies is laden with antibiotics, growth hormones, and pesticides, and therefore is not recommended for consumption by nutritionists.

One of the more interesting statistics from the World Health Organization is that the countries with the highest intake of milk also have the highest degree of osteoporosis. Now this should tell you that milk, as it's served in our grocery stores, does not build strong bones. In fact, the statistics suggest that pasteurized milk may well play role in causing osteoporosis; or is the fact that these same countries also have a high intake of red meat. You may draw your own conclusions. For more on the milk issue, see the article "True Milk" at www.jacktips.com.

MYTH #4 TUMS PROVIDES CALCIUM. [Perpetuated by Manufacturer. Endorsed by Medicine.]

Although there is calcium in Tums™, an antacid used when the tummy gets upset and burns, the calcium is not assimilable because Tums neutralizes the acids needed to make calcium bioavailable. This false claim made Tums the laughing stock of the nutritionists all over the world, but the advertisement was effective as it planted its message in the minds of unknowing consumers.

MYTH #5 DOLOMITE PROVIDES CALCIUM. [Perpetuated by suppliers.]

Dolomite, a popular health-food-store supplement, is rock -- limestone mined out of the earth. This form of calcium is known as ionically-bound calcium where the calcium atom is joined by the electrons with the carbonate molecule and magnesium. The ionic bond is a very strong bond and the body is not able to break this calcium down into elemental or ionic calcium. In other words, the body does not have an enzyme strong

enough to separate the calcium from the carbon. For an analogy, an ionic bond is the kind superglue makes. On the positive side, dolomite does serve as a hydrogogue and can bring water into the bowel. Some people have reported that they have relieved constipation by using dolomite tablets. Hopefully they don't get any dolomite into their bodies and it simply softens the stool. When dolomite is absorbed into the body, it still can carry out some functions metabolically. I've heard of it helping leg cramps. But after that, who knows? Kidney stones? Arthritis?

Calcium from plants such as green vegetables has a covalent bond. This is a weak bond, one that is easily broken. Thus calcium from plants is our best food source of calcium -- even better than milk because when milk is heated in pasteurization, the milk-calciums form an ionic bond and become very difficult for the body to use.

So here we learn that the body is not adapted to eat too many rocks or deal effectively with ionic calcium. Here is a cause of arthritis - the ionic calciums get stored in the joints because the body has such a hard time processing them.

OSTEOPOROSIS RISK SURVEY

RISK FACTORS	YES	NO
1. Is your diet high in meat protein?	___	___
2. Do you drink sodas several times a week?	___	___
3. Are you fair skinned?	___	___
4. Do you smoke?	___	___
5. Have you had your ovaries removed?	___	___
6. Do you drink alcohol?	___	___
7. Are you small boned?	___	___
8. Do your parents have Osteoporosis?	___	___
9. Do you not get much exercise?	___	___
10. Does your ancestry originate in Northern Europe?	___	___
11. Are you post menopausal?	___	___
12. Is your day to day life stressful?	___	___
13. Are you over 35 years old?	___	___
14. Have you every had a thyroid problem?	___	___
15. Do you have kidney dysfunction?	___	___
16. Do you use antiperspirants and aluminum cookware?	___	___
17. Do you not eat very many green vegetables?	___	___
18. Do you have a history of extensive antibiotics or cortisone use?	___	___
19. Do you drink coffee?	___	___
TOTAL YES		_____

If you answered yes to three of the questions, you are probably at risk for Osteoporosis. See your Systemic Nutritionist for your personal Osteoporosis Prevention Program.

SUMMARY.

Keep in mind the following points.

1. A person does not have to get osteoporosis.
2. Osteoporosis is preventable.

3. Osteoporosis is reversible, but the sooner the better.
4. Vegetables, preferably raw, are your best sources of calcium.
5. You don't need milk, after weaning, to be healthy.
6. Exercise is a life saver and a bone builder.
7. Avoid detrimental dietary intake of refined carbohydrates, processed meats, and trans fats (partially hydrogenated).
8. Be happy and prosper.

Through this information and the books of Apple-A-Day Press (www.apple-a-daypress.com) you can find the information that helps build true health and longevity.