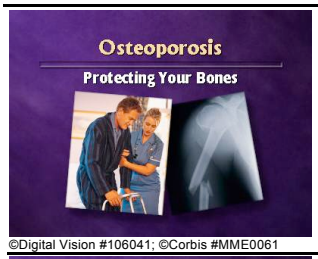
Osteoporosis



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Today osteoporosis is silently and painlessly weakening the bones of millions of unsuspecting people.

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Worldwide, one out of every three women over the age of 50 is suffering from osteoporosis.[1]

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Though commonly viewed as a disease of older women, 20% of its victims are men.[2]

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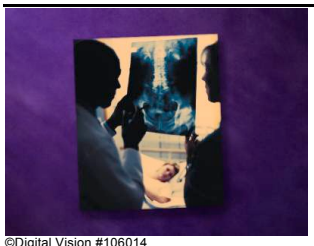
Just what is osteoporosis?

It is a disease of the bones. Strong bones gradually become thin and brittle, their insides soft and spongy. As a result, these bones can break easily.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Whether it's a wrist, spine, or hip—fractures due to osteoporosis can significantly decrease one's quality of life.

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Statistics show that this disease is steadily rising around the world.

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According to the World Health Organization, the number of hip fractures worldwide, due to osteoporosis, is expected…

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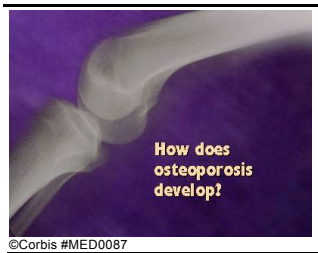
to increase 300% by the middle of the 21st century.[3]

Only one out of three people who break a hip regain their independence. One out of four die during the year after their fracture. And nearly half of those who survive still cannot walk without aid.[4]

Osteoporosis



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So how does osteoporosis develop?


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Bones increase in strength and thickness especially during the childhood and early teen years. After that, bone strength continues to develop at a slower rate until around age 35.


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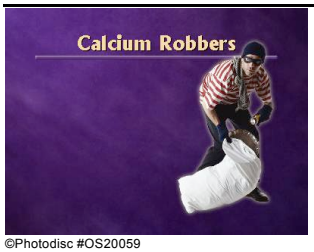
At this stage the process gradually reverses itself, and small amounts of bone are lost each year. This bone loss worsens in women after menopause.

When certain harmful lifestyle habits are present, this loss occurs more rapidly, greatly increasing your risk of getting osteoporosis.



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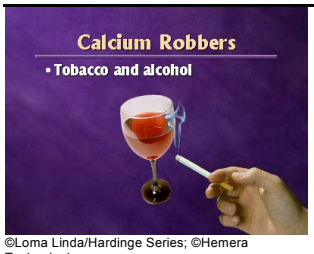
Day by day, many people are unconsciously making withdrawals from their bone reserves.

How does this occur?
Research has identified many *bone-robbing* lifestyle factors; here are a few of them—[5 6 7]



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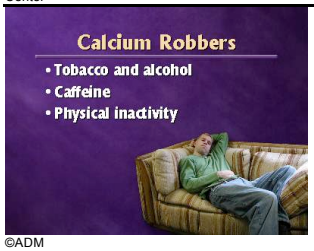
Cigarettes and alcohol disrupt the body's calcium balance in many ways—from the formation of healthy bone cells to hindering necessary calcium absorption.

©Hemera Photo-Objects; ©Wildwood Lifestyle Center

Using caffeinated beverages, such as coffee, tea, and soft drinks increases the loss of calcium through the kidneys.



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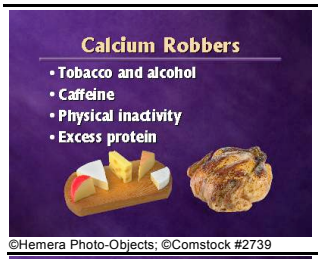
Not getting enough exercise is an especially important risk factor in today's modern society. Our bones cannot thicken and grow stronger without regular, weight-bearing exercise, such as walking. To retain their minerals, bones need to pressed, pushed, pulled, and twisted—exercise does this.

A sedentary lifestyle leads to bone loss, and lessens the body's ability to utilize and retain calcium.

Osteoporosis



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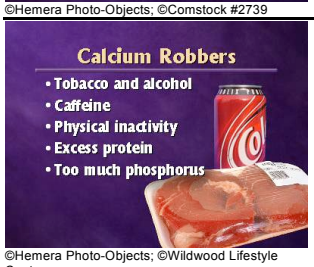
Eating a high protein diet increases one's risk of osteoporosis, especially when the protein comes from animal products.



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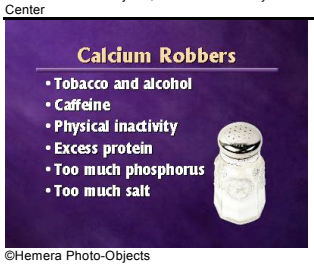
Consuming too much phosphorous, especially found in meat, dairy products, and certain soft drinks…



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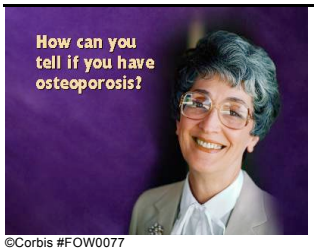
…as well as too much salt in the diet will bind up calcium, pulling it out of the body as these substances are excreted by the kidneys.

All of these things can slowly rob calcium from your bones and increase your risk of osteoporosis.



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How can you tell if you have osteoporosis?

Without professional help, you can't—not until you fracture a bone or start shrinking in height, and that's quite late in the disease.


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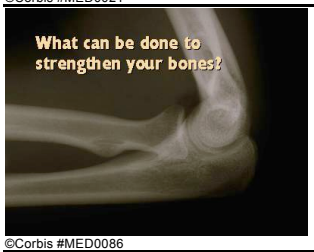
You should be tested if you are middle-aged or older and have a lifestyle that predisposes you to get this disease.



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What can be done to strengthen your bones?

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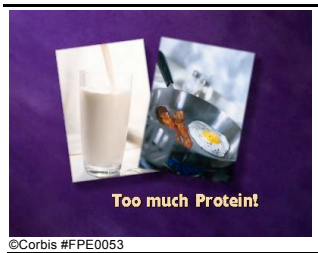
Many people believe that just by taking large amounts of calcium they can strengthen their bones and prevent osteoporosis.

Osteoporosis



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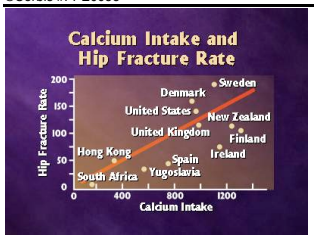
While calcium intake is important, numerous studies have clearly demonstrated that *too much protein in the diet* and not too little calcium, is the major problem.[8]



In fact, countries with the highest consumption of dairy products and calcium supplements also have the highest rates of osteoporosis.

The same is true when looking at specific groups of people.


©Corel #376057

Alaskan Eskimos, for example, eat more calcium[9] than any other group of people. Yet they have the highest rates of osteoporosis in the world! Why? It's most likely due to the fact that they also eat more protein than anyone else![10]


©Panorama Productions #000375H

Rural African people, on the other hand, eating mostly plant-based foods, receive much less calcium[11] and protein[12], yet they are essentially free of osteoporosis. [13] [14] [15]

Could it be that these people have special genes?


©Brand X #bxp35032

Not really. Researchers found that when relatives of these rural Africans migrated to the United States, and adopted the Western diet and lifestyle, they experienced rates of osteoporosis similar to the rest of Americans.[16]

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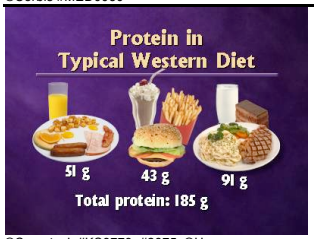
How much protein do we need?

While the World Health Organization recommends a daily protein intake of about 50 grams for an adult[17]…



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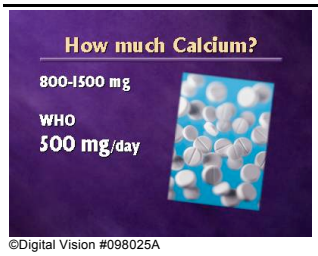
…most affluent societies on a western diet consume **double** or more this amount, as you can see from this illustration.

Actually, a low protein diet is one of the most promising therapies for osteoporosis. Studies show that when protein intake is too high, calcium is always lost from the bones, regardless of how much calcium one consumes.

Osteoporosis



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And just **how much calcium do we need** in the diet?

Various agencies have recommended
800 to 1500 milligrams a day.

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The World Health Organization however, recommends 500 milligrams as being adequate. Around the world, most populations average 200 to 400 mg of calcium a day without any evidence of osteoporosis.


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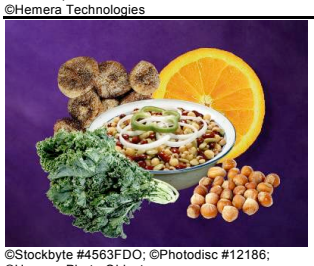
Most people don't realize that dairy products are *not* necessary to supply our body's calcium needs. The large amount of protein in these foods cancels out any benefits from the calcium they contain.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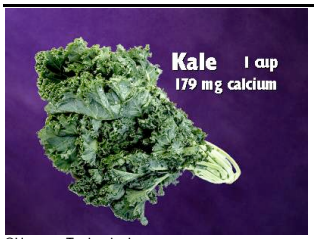
A sufficient amount of calcium can easily be obtained by eating a **variety** of plant-based foods. Unlike **high** protein animal products these plant foods, containing **moderate** amounts of protein, actually encourage calcium gain, rather than loss. In addition their calcium content is better absorbed.

Whether we look at beans, nuts, vegetables, or even fruit, God has provided us with **many** rich sources of calcium in natural plant foods.

Here are just a few examples:



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Green leafy vegetables are one of the richest sources of calcium. Enjoy them often.


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Soybeans, and tofu are good sources of calcium, and can be prepared tastefully in many ways.

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Nuts and seeds, such as almonds, filberts (hazelnuts), flaxseed, and sesame can be chopped or ground, and added to fruit salads and breakfast cereals…


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…or they can be purchased in the form of nut butter and spread on toast.


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Even fresh and dried fruit, such as oranges, raisins, and figs contain moderate amounts of calcium.


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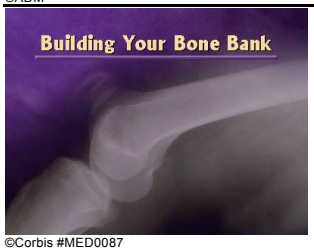
When partaking of a wide variety of natural plant foods, meeting our bodies' calcium needs is **not** a problem.



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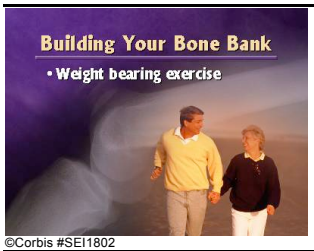
So, how can you strengthen your bones?

Once again, the answer is in the way you live. Here are some of the keys that help promote strong healthy bones and can greatly reduce your risk of osteoporosis:



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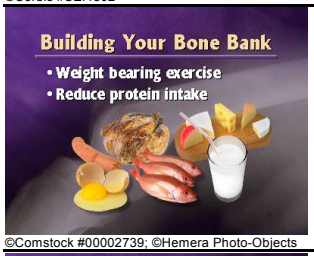
Remember the tremendous value of exercise. When there is an extra demand placed upon the bones, the body deposits calcium and other minerals to strengthen them. Use it or lose it is a saying that certainly applies to keeping bones strong.



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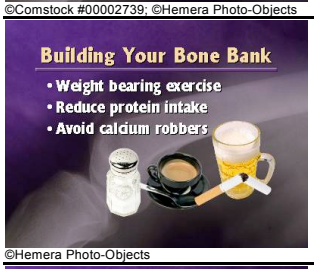
Lower your protein consumption, especially from animal sources. Excess protein can seriously deplete the body's calcium reserves.



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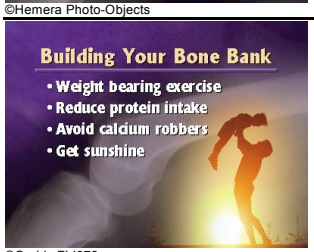
Avoid the calcium robbers. Tobacco, alcohol, caffeine, and too much salt can drain your calcium bank account.



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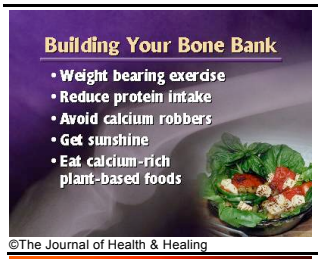
Get out in the sunshine for 15-30 minutes each day. Your body needs the Vitamin D it produces to properly utilize its calcium in the formation of healthy bones.[18]

Osteoporosis



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And, eat more calcium-rich plant-based foods. The calcium in these foods is absorbed and utilized more efficiently than from animal products.

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In conclusion, we've seen that osteoporosis is reaching epidemic proportions in many countries throughout the world.


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Yet, you need not be one of its victims. A good diet and an active, healthy lifestyle will go a long way to help keep your bones in the best of shape!


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Remember, your bone bank is like your regular bank account. If you deposit more than you withdraw, your balance grows. On the other hand,

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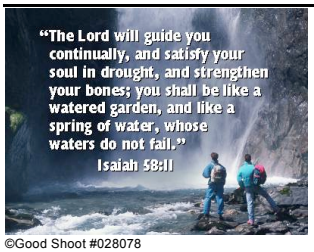
when calcium is robbed from the bones, the balance diminishes, putting you at risk of developing osteoporosis.



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Our Heavenly Father stands ready to bless all who desire and make an effort to live healthfully. Why not ask Him for wisdom and help to make the necessary changes?

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In Isaiah we are promised, The Lord will guide you continually, and satisfy your soul in drought, and **strengthen your bones**; you shall be like a watered garden, and like a spring of water, whose waters do not fail. *(Isaiah 58:11)*

Optional additional statistics for use in the localities named:

- **Europe**: Every 30 seconds someone in the European Union has a fracture as a result of osteoporosis.[19]
- **Europe and USA**: Every year there are 2.3 million bone fractures due to osteoporosis in Europe and in the United States of America.[20]
- **United States**: Some 1.3 million osteoporotic fractures occur every year in the USA alone.[21]
- **Europe, Japan, USA:** Osteoporosis affects an estimated 75 million people in Europe, Japan and the USA combined.[22]
- **Developing Countries**: Up to 75% of all hip fractures will be occurring in the developing countries 50 years from now.(Such as Asia, Africa, and South America)[23]

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2 Ludington, Aileen, and Diehl, Hans; 2000, Health Power, Review and Herald Publishing, Hagerstown, Maryland, p. 56-57

3 (Source: Press release WHO, October 11,1999; http://www.who.int/inf-pr-1999/en/pr99-58.html)

4 Nutrition Action, Center for Science in the Public Interest, Feb. 2002, p.1

5 The Surgeon General's Report on Nutrition and Health. U.S. DHHS (PHS) Publication No.88-50211. Superintendent of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402

6 Cummings SR, Nevitt MC, et al. Risk factors for hip fracture in white women. Study of Osteoporotic Fractures Research Group. N Engl J Med 1995 Mar 23;332(12):767-773.

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9 Eskimos consume a high level of 2500 mg of calcium a day. Mazess RB , Mather W. Bone mineral content of North Alaskan Eskimos. Am J Clin Nutr 1974 Sep;27(9):916-925.

10 Eskimos also have high protein intake, between 250-400 grams a day. [x]

11 350mg of calcium per day

12 47 grams of protein per day

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14 Walker, A., Osteoporosis and Calcium Deficiency, American Journal of Clinical Nutrition, 16:327, 1965

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16 Smith, R., Epidemiologic Studies of Osteoporosis in Women of Puerto Rico and Southeastern Michigan… Clin Ortho 5:32, 1966

17 Food and Agriculture Organization/ World Health Organization/ United Nations University (1985). 'Energy and protein requirements', WHO Technical Report Series 724. Geneva, WHO.

18Web page at: Physician's committee for Responsible Medicine: http://www.pcrm.org/health/Preventive_Medicine/strong_bones.html

19 Source: WHO website quoting the International Osteoporosis Foundation http://www.who.int/inf-pr-1999/en/pr99-58.html

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21 http://www.who.int/hrp/progress/40/07.html

22 http://www.who.int/hrp/progress/40/07.html

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