

## **Osteoporosis: The Preventable Epidemic**

By Brendon H. Clark

### **What is Osteoporosis?**

Bone is an active living tissue made of a protein framework to which various minerals attach and bond. Throughout life, bone is constantly dissolved and utilized by the body in a dynamic process called "bone remodeling". When your body cannot replace as much bone matrix as it uses, you have the onset of Osteopenia and eventually the more advanced form, Osteoporosis.

Although osteoporosis and osteopenia are usually thought of as disorders that only menopausal and postmenopausal women suffer from, the reality is that over 11 million men also suffer from this disease that kills more people every year than cervix and breast cancer combined.

### **How do you get it?**

There are two primary reasons why your body may not be able to replace the bone it uses. The first is that you may not be getting the minerals and vitamins in your diet necessary to build new bone. Without the proper amounts of calcium, magnesium, chromium, potassium, vanadium, and Vitamin D, building bone is severely compromised.

The second most common reason people become afflicted with osteoporosis is hormone imbalance. For example, the lack of the hormone estrogen and/or progesterone, which is common among women during and after menopause, creates a problem. Estrogen's most important effect on osteoporosis appears to be that it limits the life span of osteoclasts, the cells responsible for bone breakdown. It also helps maintain normal levels of vitamin D, a nutrient vital for the absorption of calcium and in turn bone growth. Additionally, high cortisol, produced by the adrenal glands under stress, can accelerate bone loss.

### **Prevention and Treatment**

You can do several things to lower your chances of becoming osteoporotic and even treat the disease if you have already been diagnosed. The first step is to get tested. Early detection and subsequent treatment of osteoporosis can mean the difference between effectively stopping the disease and suffering lifelong chronic pain.

The simplest and least costly treatment option is to make basic changes in your lifestyle and dietary habits. For example, numerous studies have shown that weight-bearing exercise greatly decreases your risk of becoming osteoporotic. In addition, drinking soda, eating a diet high in refined sugar, and smoking, all lower phosphorus levels. Since bone is about 85% tricalcium phosphate, too little phosphorus promotes calcium loss and thus bone deterioration.

Another important part of limiting bone loss is making sure that you are getting enough nutrients to constantly rebuild bone. Even if you are health conscious, eat right, and take nutritional supplements, you still may not be able to regrow bone. If your body cannot absorb vitamins and minerals after they enter your digestive system, then all the supplements in the world will not prevent you from becoming osteoporotic.

The ability to absorb the nutrients from the foods you eat is a key to preventing all disease, not just osteoporosis. To ensure that your body can make full use of all available nutrients, any mineral supplement you take should contain vitamin D to aid in calcium absorption, as well as betaine and glutamic acid to help absorb the minerals in the supplement.

Excess stress can be a cause for lack of absorption of vital nutrients. Stress, in all its forms, mental, physical, or environmental, drives cortisol, a hormone that in excess amounts results in a breakdown of body tissues including demineralization of bone. Also, when the body is in an inflammatory condition, it is very difficult for optimal digestion and absorption to occur. Causes of inflammation may include gluten intolerance, allergies, food intolerances, and infectious agents. Gluten intolerance is something I suggest all my patients be tested for. Because gluten intolerance can effectively prevent your body from receiving vital nutrients, it is often one of the driving causes behind numerous illnesses and diseases. The #1 side effect of gluten intolerance is accelerated osteoporosis.

Another treatment option for osteoporosis is the use of hormone replacement therapy (HRT). Recently, findings from the *National Cancer Institute and Women's Health Initiative* have shown that conventional HRT is a dangerous practice. I prefer natural hormone replacement therapy (NHRT) over HRT. NHRT has been shown to increase bone density, reduce fractures, and improve overall hormone function and balance. I recommend that all my patients do testing to determine the exact dosage of hormones they need before they begin taking any hormones. Indiscriminate use of hormones can lead to substantial health problems, including cancer. However, when NHRT is used correctly it can benefit a variety of health disorders, including risks for cardiovascular and autoimmune diseases, as well as cancer, and give people that young, vigorous feeling they once had.

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